FINANCE

The Master of Science in Finance prepares students for success in the financial professions. 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 12-16 months of full-time study. Admission is rolling, and students may begin the program in September or January. May admission is also usually possible for part-time students.

University of Michigan-Dearborn students who have been admitted to the MS-Finance may take up to 6 graduate credits during the final semester of their undergraduate program. Students must successfully complete their undergraduate degree before taking any additional graduate-level courses.

MS in Finance Program Goals and Objectives

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

Objectives: MS in Finance students will have the ability to:

1. Evaluate Banking, Insurance, and Fintech's role in the modern financial system.
2. Analyze and manage risk in a global setting.
3. Estimate the value of real assets.
4. Estimate the value of financial assets.
5. Evaluate managerial decisions concerning financial policy.
6. Apply portfolio theory concepts to construct optimal risky assets portfolios that meet the objectives and constraints of their clients.

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

Objective 1: MS in Finance students will be able to convey finance knowledge through 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 Finance Curriculum

Code	Title	Credit Hours
Foundation Courses [1]		
Required:		0-12
ACC 505	Devel & Interp Financial Info	
BE 530	Econ Analysis: Firm & Consumer	
BA 510	Introduction to Business Analytics	
or DS 520	Applied Statistical Modeling	
FIN 531	Fin Fundament & Value Creation	
Core Courses		
Required:		18
FIN 581	Advanced Corporate Finance	
FIN 650	Corporate Valuation & Strategy	
FIN 651	Investment Procedures, Analysis & Management	
FIN 652	Derivatives & Risk Management	
FIN 654	Banking, Insurance, and Fintech	
ACC 608	Financial Statement Analysis	
or ACC 514	Financial Reporting	
Electives		
Select one to four courses (3-12 credits). Must include at least **one** FIN course:		3-12
ACC 516	Intermediate Financial Accounting III	
ACC 555	Cost Management	
ACC 603	Management Control Systems	
BA 530	Programming and Data Structures with Python	
BE 583	Global Econ: Crisis & Growth	
DS 630	Applied Forecasting with Python	
FIN 653	Asset Pricing and Portfolio Management	
FIN 655	International Financial Mgt	
FIN 656	Fixed Income Securities	
FIN 657	Investment Fund Management	
FIN 658	Algorithmic Finance Using Python	
BA 682	Experiential Project [2]	
BA 690	Graduate Research [2]	
BA 691	Graduate Seminar [2]	
BI 500	Business Internship [2]	
Total Credit Hours		**30-33**

[1] Previous equivalent undergraduate or graduate coursework may qualify students to waive any of the foundation courses. Students may complete the MS-Finance in as little as 30 credit hours if they have completed all four 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 33 credit hours.

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

Up to 9 transfer credits for previous equivalent graduate coursework can be applied to the degree if those credits have not been counted toward a degree.

- MBA/MS Finance (http://catalog.umd.umich.edu/graduate/college-business/dual-degrees/mba-ms-finance/)
- MS Accounting/MS Finance (http://catalog.umd.umich.edu/graduate/college-business/dual-degrees/ms-accounting-ms-finance/)

Learning Goals

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

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FIN 531 Fin Fundament & Value Creation 3 Credit Hours
This course provides the fundamentals of the finance discipline with an emphasis of value creation as the primary objective of a corporation. Capital budgeting analysis and techniques are extensively discussed. Valuation of securities is presented along with an introduction to modern portfolio theory and market efficiency. Issues related to international financial management are also introduced.
Prerequisite(s): (Math Placement with a score of 105 or MATH 104 or MATH 105 or MATH 113 or MATH 115) and (DS 520* or BA 510* or IMSE 510* or IMSE 514*) and ACC 505
Restriction(s):
Can enroll if Class is Graduate

FIN 581 Advanced Corporate Finance 3 Credit Hours
This course integrates theory and practice for major topics such as capital structure and dividend policy. Additional topics may include capital raising, corporate governance, mergers and acquisitions, short-term financial management, valuation of levered firms, leasing, and risk management, etc.. These topics are examined from the perspective of the corporate financial manager.
Prerequisite(s): FIN 531 and ACC 505 and (DS 520 or BA 510 or IMSE 510 or IMSE 514) and (Math Placement with a score of 105 or MATH 104 or MATH 105 or MATH 113 or MATH 115)

FIN 650 Corporate Valuation & Strategy 3 Credit Hours
This course examines a variety of financial management topics, such as project and enterprise valuation and risk analysis, corporate restructuring, dividend policy, corporate governance, and current asset management using case studies and readings.
Prerequisite(s): FIN 581

FIN 651 Investment Procedures, Analysis & Management 3 Credit Hours
This course provides an examination of the process of investment analysis and management. Topics include: analysis of fixed income securities, stock valuation, and introduction to derivative securities; discussion of portfolio theory and management; and an overview of investment environment. Wherever it is appropriate, the above topics will also be discussed in a global context.
Prerequisite(s): ACC 505 and FIN 531 and (DS 520 or BA 510 or IMSE 510 or IMSE 514) and (Math Placement with a score of 115 or MATH 104 or MATH 105 or MATH 113 or MATH 115)
Restriction(s):
Can enroll if Class is Graduate

FIN 652 Derivatives & Risk Management 3 Credit Hours
The focus of this course is on understanding the derivative securities and their use in risk management. This course provides an in-depth introduction to options and option pricing as well as an extensive overview of forward, future and swap contracts. This course will draw upon the intuition and analytic tools developed to examine sophisticated financial products or strategies that firms and investors have used in their risk management.
Prerequisite(s): FIN 531 and (DS 520 or BA 510 or IMSE 510 or IMSE 514) and (Math Placement with a score of 105 or MATH 104 or MATH 105 or MATH 113 or MATH 115)
Restriction(s):
Can enroll if Class is Graduate

FIN 653 Asset Pricing and Portfolio Management 3 Credit Hours
This course prepares students for career development and advancement in the challenging investment profession. The course provides an in-depth study of advanced contemporary topics in asset pricing and portfolio management. Topics may include a subset of: advanced investment theory and valuation techniques, behavioral finance, asset allocation strategies, fixed income and equity investment management, portfolio management techniques, performance evaluation and risk management of assets in financial institutions.
Prerequisite(s): FIN 651 and (DS 520 or BA 510 or IMSE 510 or IMSE 514)
Restriction(s):
Can enroll if Class is Graduate

FIN 654 Banking, Insurance, and Fintech 3 Credit Hours
Financial intermediaries provide services to borrowers and lenders, and investors and businesses. This course will examine the financial intermediation. While commercial banking will be a particular focus, attention will also be paid to firms such as pension funds and insurance companies. The role of risk management, from both a corporate and a regulatory perspective, will be explored. New technologies are affecting banking and other financial intermediaries, and this course will examine the roles of fintech both for financial intermediaries and the economy as a whole.
Prerequisite(s): FIN 531 and (DS 520 or BA 510 or IMSE 510 or IMSE 514) and (Math Placement with a score of 115 or MATH 104 or MATH 105 or MATH 113 or MATH 115)
Restriction(s):
Can enroll if Class is Graduate

FIN 655 International Financial Mgt 3 Credit Hours
This course views international finance at the micro level, but of necessity it will cover some aspects of macro-level international finance as well, such as the international financial system and balance of payments mechanism. The following topics will be covered: the international financial system, balance of payments, foreign exchange, exchange risk management, international financial markets, foreign investment, and foreign trade financing.
Prerequisite(s): FIN 531 and ACC 505 and BE 530 and (Math Placement with a score of 115 or MATH 104 or MATH 105 or MATH 113 or MATH 115)

FIN 656 Fixed Income Securities 3 Credit Hours
The fixed income market, accompanied by the introduction of sophisticated financial engineering techniques, has become a vital segment of the global financial market and fixed income securities are key component of any investment strategy. This course focuses on the valuation and application of fixed income securities and their derivatives. Topics include the types of fixed-income securities and their unique features, term structure of interest rate dynamics, how to price fixed income securities and their derivatives, and how to measure and manage the risks associated with investment in these securities. The materials covered in this course are compatible with the Common Body of Knowledge in Analysis of Debt Investments that is required by the Chartered Financial Analysts (CFA) examination.
Prerequisite(s): (MATH 104 or MATH 105 or MATH 113 or MATH 115 or Math Placement with a score of 116) and FIN 531 and ACC 505 and (DS 520 or BA 510 or IMSE 510 or IMSE 514)
Restriction(s):
Can enroll if Class is Graduate

FIN 657 Investment Fund Management 3 Credit Hours
This course introduces finance students to investing approaches and analytical techniques including both Intrinsic and Relativistic analyses used for security analysis employed and implemented by professional money managers. The course is recommended for finance students seeking to develop careers related to money management, investment analysis, financial analysis, portfolio management and related financial services careers. The main focus of the course is to gain the experience and skills of equity securities analyses through the Student Managed Investment Fund. The course requires application of fundamental and intrinsic equity analyses valuation. Graduate students are required to analyze data at a more advanced level than that required of undergraduate students. (F,W,OC) Students cannot receive credit for both FIN 457 and FIN 657
Prerequisite(s): FIN 651

FIN 658 Algorithmic Finance Using Python 3 Credit Hours
In this course, students learn to develop, test, and implement algorithmic trading strategies designed to produce higher returns with acceptable risk. Students use the Python programming language to evaluate the strategies they develop. The class will generally focus on the US equities market but other markets, such as the currency market, will also be explored. This course is interdisciplinary in that it students use finance knowledge to construct strategies, programming knowledge to implement strategies, and statistical analytic skills to evaluate those strategies. (F, W).
Prerequisite(s): FIN 531 and BA 530 and (DS 520 or BA 510 or IMSE 510 or IMSE 514)

*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally