

# MS IN FINANCE (MS)

Program Director: Mark Zaporowski, PhD

The Master of Science in Finance program at Canisius University is offered full or part-time in a non-cohort model allowing students to enter the program three times per year. Day availability required as finance courses are offered during the day twice a week for approximately 1 hour and 20 minutes. It is a 30 credit hour program which may be completed in as little as 12 months. The program combines a solid theoretical grounding in the fundamentals of finance with applied quantitative and qualitative training to prepare graduates for careers in finance.

The undergraduate finance program at Canisius University is widely respected and was recognized as one of the top undergraduate business programs in the nation. Graduates of this program go on to work in equity research, banking, risk management, and other diverse finance functions locally, nationally, and beyond. The MS in Finance program was created to offer this top-ranking curriculum to students with an undergraduate degree in a quantitative discipline who have discovered an interest in the exciting and fast-paced world of banking and finance. Students will work closely with faculty in the program, including the academic director, to ensure effective progress through the program. Applied projects will help the students hone their quantitative skills and improve their oral and written communication abilities as deliverables will mimic the expectations of a professional work environment. It is the goal of the program to place as many graduates of possible on a strong career path in financial services.

The MS in Finance offers four track options, depending on students' backgrounds and career interests. Investment Research is for students who want to combine quantitative and qualitative analysis to conduct analysis of various investments at the institutional level. The Risk Management option is for students with a more quantitative mindset that are interested in the growing field of measuring and managing risk to protect banks and other financial institutions from disaster. Data Analytics is for students who enjoy programming and working with big data sets and who want to do so in a finance setting. The General Finance track is for students without a finance background and who want a focused graduate degree to advance their career.

## Curriculum

Code	Title	Credits
<b>Leadership &amp; Professional Development Courses</b> <sup>1</sup>		
BUS 601	Navigating Your Professional Journey	.5
BUS 602	Career Compass	.5
<b>Preparatory Courses</b> <sup>2</sup>		
ACC 505	Financial Accounting	3
ECO 503	Statistics for Managers with Excel	3
ECO 606	Managerial Economics	3
<b>Required Finance Core</b>		
FIN 608	Corporate Finance	3
FIN 620	Investment Management	3
FIN 622	Financial Institutions and Markets	3
or ECO 621	Money, Banking and the Economy	
FIN 617	Portfolio Analysis	3
FIN 691	Supervised Applied Integrative Project	3

<b>Electives</b> <sup>3</sup>	
Select 5 elective courses below	15
<b>Total Credits</b>	<b>40</b>

<sup>1</sup> Students are required to complete the Leadership & Professional Development Program. Upon completion of the courses students will receive a LPD certificate and electronic badge.

- BUS 601 must be taken first semester
- BUS 602 must be taken second semester

<sup>2</sup> Students are required to have Calculus and knowledge of and competencies in excel. In addition, preparatory courses can be completed at Canisius or depending on undergraduate course work, may be waived.

<sup>3</sup> Students are encouraged to select their elective courses from one of the four options listed below.

## Finance Core

Students who can demonstrate waiver of one or more Finance Core courses (FIN 608, FIN 620, FIN 622 or ECO 621, and FIN 617) will substitute additional courses in the General Finance Track or even to add a second concentration if possible in order to reach the minimum program requirement of 30 credit hours.

## General Finance Track (15 credits)

Code	Title	Credits
Select 4 finance electives from any of the tracks below		12
Select 1 graduate-level electives <sup>1</sup>		

<sup>1</sup> Graduate electives must be from a related field (Accounting (<https://catalog.canisius.edu/graduate/courses/acc/>), Economics (<https://catalog.canisius.edu/graduate/courses/eco/>), Management (<https://catalog.canisius.edu/graduate/courses/mgt/>), Marketing (<https://catalog.canisius.edu/graduate/courses/mkt/>), or Data Analytics (<https://catalog.canisius.edu/graduate/courses/dat/>)) or approved by program director.

## Investment Research Concentration

Code	Title	Credits
FIN 623	Fixed Income Securities	3
FIN 624	Golden Griffin Fund I <sup>1</sup>	3
FIN 629	Golden Griffin Fund II	3
FIN 812	Equity Analysis	3
FIN 628	Derivative Securities	3
<b>Total Credits</b>		<b>15</b>

## Risk Management Concentration

Code	Title	Credits
BAN 609	Business Analytics & Forecasting	3
FIN 619	Financial Modeling	3
FIN 623	Fixed Income Securities	3
FIN 628	Derivative Securities	3
FIN 658	Risk Management & Financial Institutions	3
<b>Total Credits</b>		<b>15</b>

## Data Analytics Concentration

Students will select from the following menu to complete the two-course minimum programming requirement. Additional courses taken in this menu over the two-course minimum will be counted toward the 15-credit concentration minimum:

Code	Title	Credits
BAN 609	Business Analytics & Forecasting	3
CSC 511	Introduction to Programming <sup>1</sup>	3
CSC 512	Data Structures and Algorithms <sup>1</sup>	3
Select 2 of the following electives:		6
DAT 511	Data Stewardship: Preparation, Exploration and Handling of Big Data	
CSC 610	Database Management	
DAT 521	Applied Integrative Projects in Data Analytics I	
FIN 619	Financial Modeling	
<b>Total Credits</b>		<b>15</b>

<sup>1</sup> A minimum of two programming courses required depending on prior preparation. For students with no prior programming background, CSC 511 and CSC 512 are required toward the minimum of two programming courses and will count toward the 15-credit concentration minimum. Students who demonstrate prior programming credit for one or more of these courses will substitute additional courses to meet the 15-credit concentration minimum.

## Roadmap

### First Year

#### Summer

BUS 601  
ACC 505  
ECO 503  
ECO 606  
FIN 608

### First Year

Fall	Spring
BUS 602	FIN 617
FIN 620	FIN 691
ECO 621 or FIN 622	Elective
Elective	Elective
	Elective

## Learning Goals and Objectives

### Student Learning Goal 1

Graduates of the MS Finance Program will demonstrate an understanding of theory and practice of corporate finance, investments, and financial institutions and markets.

### Student Learning Goal 2

Graduates will identify principled, ethical financial decisions and understand their duties as described in the *Code of Ethics and Professional Conduct*.

### Student Learning Goal 3

To prepare students to be career-ready by creating a professional brand, assessing leadership and skill capabilities and ascertaining a career path. Students will develop job search skills, master the interview and cultivate a professional network.

## Courses

Accounting (ACC) Course (p. 2), Leadership & Professional Development Business (BUS) Courses (p. 2), Economics (ECO) Courses (p. 2), Finance (FIN) Courses (p. 3)

### Accounting (ACC) Course

**ACC 505 Financial Accounting** **3 Credits**  
Reporting the financial results of operations and financial position to investors, creditors, and managers; examination of problems that arise in the preparation, analysis and use of accounting data, with emphasis on the use of financial reports.  
**Offered:** every fall & spring.

### Leadership & Professional Development Business (BUS) Courses

**BUS 601 Navigating Your Professional Journey** **0.5 Credits**  
This course is about preparing our students for their next steps after graduate school.  
**Offered:** every fall & spring.

**BUS 602 Career Compass** **0.5 Credits**  
Students will go over skills needed to obtain a job.  
**Prerequisite:** BUS 601.  
**Offered:** every fall, spring, & summer.

**BUS 698 Internship** **0.5-6 Credits**  
Student works in an organization to gain work experience. As the internship is for academic credit, a student will have to secure a faculty supervisor and will have to complete academic assignments. Approval of an internship requires the completion of an application located in the student's portal.  
**Offered:** every fall, spring, & summer.

**BUS 699 Graduate Business Independent Study** **3 Credits**  
Students are working on a special project or course related to content of their graduate business degree.  
**Offered:** occasionally.

### Economics (ECO) Courses

**ECO 606 Managerial Economics** **3 Credits**  
This course is designed to acquaint students with market forces that affect the decision making process of managers. It provides the analytic framework to understand consumer behavior, production technology, and input costs. Students will also learn how markets and the global environment influence managers, set prices and respond to the strategies of their competitors for long term firm sustainability.  
**Offered:** every fall, spring, & summer.

**ECO 621 Money, Banking and the Economy** **3 Credits**  
The connection between financial markets, the economy, and the Federal Reserve will be explored. This course will examine the nature of financial markets, the determination of interest rates, banking, money and monetary policy. Emphasis will be placed on the impact of monetary policy on the macro economy.  
**Prerequisite:** MBA 504 or ECO 504.  
**Offered:** every fall.

## Finance (FIN) Courses

### FIN 608 Corporate Finance 3 Credits

This course provides the basic tools of Financial Management. It introduces you to the goal of Financial Management, analysis of financial statements, the concepts of cash flow, financial planning, time value of money, capital budgeting, the principles of valuation, the concepts of return and risk, the use of financial leverage, the cost of capital, dividend policy and working capital management.

**Prerequisite:** ACC 505 and ECO 503.

**Offered:** every fall, spring, & summer.

### FIN 617 Portfolio Analysis 3 Credits

An introduction to modern portfolio theory and management. Strategies underlying portfolio construction and evaluation. Implications of market efficiency on portfolio management.

**Prerequisite:** MBA 620 or FIN 620.

**Offered:** every fall.

### FIN 619 Financial Modeling 3 Credits

Programming in EXCEL via construction of custom functions and macros using Visual Basic. These techniques are applied to a variety of financial models.

**Prerequisite:** FIN 608, FIN 508, or MBA 508.

**Offered:** every fall.

### FIN 620 Investment Management 3 Credits

This course introduces the student to the construction, management, and performance evaluation of investment portfolios. Primary topics include portfolio models, equilibrium in financial markets, market efficiency and the application of these concepts to the investment industry.

**Prerequisite:** FIN 608, FIN 508 or MBA 508.

**Offered:** every fall, spring, & summer.

### FIN 622 Financial Institutions and Markets 3 Credits

This course examines the changing world of financial services and the role that financial intermediaries and financial markets are playing in a rapidly consolidating industry with new benchmarks and success factors. Universal banking as the new model will be analyzed. Emphasis will be placed on contemporary issues as well as a review of the history of this evolving industry.

**Prerequisite:** MBA 508 or FIN 508.

**Offered:** every spring.

### FIN 623 Fixed Income Securities 3 Credits

This course discusses the various types of fixed income securities and the markets in which they are traded. Emphasis is placed on contact evaluation, extracting term/risk structure information from pricing, evaluating, investment opportunities and interest rate risk management.

**Prerequisite:** MBA 620 or FIN 620.

**Offered:** every fall.

### FIN 624 Golden Griffin Fund I 3 Credits

This course is the first of a two semester program in which students become equity analysts and portfolio managers responsible for 'real money' portfolio of common equity securities (the Golden Griffin Fund or 'GGF'). In the fall semester, students begin the process of stock selection and analysis, leading to recommendations for investment by the GGF. Students follow and discuss current events in the economy and financial markets, and monitor and produce written reports regarding current GGF portfolio positions. Students serve on committees, including: Accounting and Finance; Legal and Compliance; Marketing; Public Relations and Portfolio Management. Each committee will have certain responsibilities throughout the fall and spring semesters. Students taking MBA 624 are expected to continue into the spring semester in MBA 629. Student must apply in early spring before the upcoming fall semester Offered; fall

**Prerequisite:** MBA 620 or FIN 620 concurrent with MBA 812 or FIN 812.

**Offered:** every fall.

### FIN 626 International Finance 3 Credits

International Finance (also known as 'Open-Economy Macroeconomics') is the study of the monetary and economic linkages among countries. The main goal of this course is to equip students with an understanding of the global macroeconomic environment. The following topics will be covered: purchasing power parity, interest rate parity, exchange rate determination, international capital flows. MBA 504, MBA 508

**Prerequisite:** MBA 508 or FIN 508 and MBA 504 or ECO 504.

**Offered:** Occasionally.

### FIN 628 Derivative Securities 3 Credits

This course discusses forward and futures contracts, swaps and options. Markets for these securities are described and analyzed. Modern techniques for identifying over and undervalued contracts are presented. The use of derivative securities in risk management is discussed.

**Prerequisite:** MBA 620 or FIN 620.

**Offered:** occasionally.

### FIN 629 Golden Griffin Fund II 3 Credits

This course is the second of a two semester program in which students become equity analysts and portfolio managers responsible for 'real money' portfolio of common equity securities (the Golden Griffin Fund or 'GGF'). In the spring semester, students begin the process of original equity research, leading to recommendations for investment by the GGF. Students continue to follow and discuss current events in the economy and financial markets, and monitor and produce written reports regarding current GGF portfolio positions. Committee work started in the fall semester continues as well.

**Prerequisite:** either MBA 624 or FIN 624 and either MBA 812 or FIN 812.

**Offered:** every spring.

### FIN 650 Introduction to Personal Financial Planning (CFP qualified) 3 Credits

Survey of topics in wealth management and personal financial planning. Review development of the wealth management industry, including the evolution of the high-net-worth investor segment. Various approaches to asset management, benchmarks for evaluating portfolio performance, risk tolerance, and tax and estate planning issues will be explored.

**Prerequisite:** MBA 620 or FIN 620.

**Offered:** fall.

**FIN 652 Risk Management & Insurance****3 Credits**

Globalization, technological advances and their subsequent adaptations by enterprises and economies has led to rapid changes in how risks are evaluated and mitigated. The ability to identify/anticipate, measure, financially and operationally manage, mitigate and communicate risk exposures faced by an organization is essential to its business success. Moreover, the ability to communicate the various impacts and consequences of material risk exposures to executive management and other enterprise stakeholders is becoming a critical management skill. In this course we will discuss processes used by organizations to manage the risks that they face, with an emphasis on the types of risk commonly handled through the commercial insurance market. Coursework will address the costs and benefits of risk management, the goals of the process and the methods available to manage risks. Methods covered include traditional and nontraditional mitigations including retention, commercial insurance, captives, contractual risk transfer, etc. Throughout the semester, students will have the opportunity to learn more about the role of risk managers, insurance underwriters, brokers and other risk stakeholders through case studies, guest lecturers and local risk management events aimed at providing students a holistic picture of the industry. Students will be expected to demonstrate their understanding of current risk-related topics through class discussion, homework assignments, projects, and exams.

**Offered:** occasionally.**FIN 657 Financial Modeling with SAS****3 Credits**

Building financial models for forecasting and analyzing investment and financial products using the SAS programming language. Models in the areas of corporate finance, equities, bonds, portfolio management and derivative securities will be explored.

**Offered:** every fall & spring.**FIN 658 Risk Management & Financial Institutions****3 Credits**

This course will provide a comprehensive overview of Risk Management for Financial Institutions by examining the major risk categories and the key elements for effectively managing those risks. It will include coverage of the core risk principles and frameworks of an effective risk management program.

**Prerequisite:** FIN 608.**Offered:** occasionally.**FIN 674 Business Analytics Using R****3 Credits**

This course introduces students to the open source software language R. Students will access publicly available financial data, process and analyze the data using R code. Analysis of financial ratios, investment portfolios, options, CAPM, Monte Carlo simulation, Value at Risk modeling and market microstructure will be explored.

**Prerequisite:** MBA 508 or FIN 508.**Offered:** occasionally.**FIN 691 Supervised Applied Integrative Project****3 Credits**

Special project or internship experience designed and supervised by a faculty member in conjunction with program professional partners. Intended primarily for the Risk Management or Data Analytics concentrations to be fully integrative with business applications. Examples may include risk management or big data projects for or within investment firms or financial institutions.

**Offered:** every fall, spring, & summer.**FIN 698 Finance Internship****1-4 Credits**

Internship experience.

**Offered:** every fall, spring, & summer.**FIN 812 Equity Analysis****3 Credits**

The analysis and valuation of equity securities is developed in stages using a case approach based on live publicly traded companies. Valuation models and the concept of value creation follows preliminary analysis of financial statements and market based financial information on risk and return.

**Prerequisite:** MBA 620 or FIN 620.**Offered:** every fall.