

# MASTER OF SCIENCE IN FINANCE

The MS in Finance (MSF) provides a unique opportunity for individuals who want to enhance their career opportunities in the areas of investment management, corporate finance, or investment banking. Students may begin the program in September or January. The program consists of 10 three-credit courses (seven required and three electives). The MSF program is especially useful for those who want to pursue advanced certification, such as the CFA. MSF students may elect to pursue a specialization in either business analytics, corporate finance or (assuming a related undergraduate degree) accounting. Applicants should hold an undergraduate degree and have an adequate background in the areas of economics, financial accounting, and statistics. The GMAT/GRE requirement may be waived for MSF applicants. Please see our website for more information about requesting a GMAT/GRE waiver.

## Program

### Curriculum

Code	Title	Credits
FNCE 6530	Corporate Finance	3
FNCE 6540	Investment Analysis	3
FNCE 6545	Portfolio Management	3
FNCE 6560	Global Financial Markets and Institutions	3
FNCE 6565	Derivative Securities	3
FNCE 6580	Financial Risk Management	3
FNCE 6595	Research Methods in Finance <sup>1</sup>	3
Select a specialization (detailed below) or three elective courses from the following: <sup>2</sup>		9
FNCE 6500	Shareholder Value	
FNCE 6555	International Financial Management	
FNCE 6570	Fixed Income Securities	
FNCE 6575	Capital Budgeting	
FNCE 6900	Contemporary Topics Seminar	
FNCE 6990	Independent Research Seminar	
Total Credits		30

<sup>1</sup> Designated research course.

<sup>2</sup> Students are required to complete nine elective credits (three courses) of graduate work at the 6000 level. Students may choose elective courses from finance, to fulfill the requirements of one of the specializations listed below, or to enrich their studies an area of interest relevant to the study of finance at the graduate level.

### Accounting Specialization

To be eligible to pursue an accounting specialization within the MSF, students must have an undergraduate degree (BS or BA) with a major in accounting or the equivalent.

To complete a specialization in Accounting, students take any three graduate Accounting or Taxation courses at the 6000 level for their required three electives. All course selections should be made in

consultation with the Directors of Graduate Finance and Accounting, or designee(s).

### Business Analytics Specialization

Business Analytics refers to the skills, technologies, applications and practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning by using data and statistical methods. A variety of industries are in need of professionals who can take on positions of responsibility for collecting, analyzing and interpreting data in order to make sound strategic business decisions. To complete a specialization in business analytics, students take the following three business analytics classes as a replacement for the three finance electives.

Code	Title	Credits
BUAN 6500	Business Analytics	3
BUAN 6505	Python for Business Analytics	3
BUAN 6510	Databases for Business Analytics	3
Total Credits		9

### Corporate Finance Specialization

For those students would like to broaden and deepen skills in corporate development/strategic planning and/or risk management, the program offers a specialization in Corporate Finance. For the specialization in corporate finance, students complete the following:

Code	Title	Credits
FNCE 6500	Shareholder Value	3
Select two of the following:		6
BUAN 6530	Business Forecasting and Predictive Analytics	
FNCE 6555	International Financial Management	
FNCE 6575	Capital Budgeting	
Total Credits		9

### MBA and MS in Finance Overlap

The MBA with a concentration in Finance (MBA-FI) is a generalist degree that covers all relevant topical areas for a business professional and gives students the opportunity to concentrate, but not major in, Finance. Immediately after completion of the MBA-FI, students sometimes wish to further their graduate study in Finance. Interested students then may apply for admission to the MS in Finance and, once accepted, can earn the degree by completing an additional 6 courses drawn from the MS in Finance Curriculum. Courses are selected in advisement with the Coordinator of Graduate Finance Programs. Students are encouraged to seek individualized advisement well before completing the MBA-FI.

## Courses

### **FNCE 5400 Principles of Finance**

**3 Credits**

**Prerequisites:** ACCT 5400, BUAN 5400.

This course examines the fundamental principles of modern finance that are helpful in understanding corporate finance, investments, and financial markets. More specifically, the course examines the time value of money; the functioning of capital markets; valuation of stocks, bonds, and corporate investments; risk measurement; and risk management. Students learn to use sources of financial data and spreadsheets to solve financial problems. Previously FI 0400.

### **FNCE 6500 Shareholder Value**

**3 Credits**

**Prerequisite:** FNCE 5400.

This course examines business decision-making with the aim of creating and managing value for shareholders. Accordingly, students learn how to lead and manage a business in a competitive environment. This involves the formulation of corporate objectives and strategies, operational planning, and integration of various business functions leading to greater shareholder value. Topics include investment and strategic financial decision-making. A business simulation facilitates the learning process. Previously FI 0500.

### **FNCE 6530 Corporate Finance**

**3 Credits**

This course provides an exploration of theoretical and empirical literature on corporate financial policies and strategies. More specifically, the course deals with corporate investment decisions, capital budgeting under uncertainty, capital structure and the cost of capital, dividends and stock repurchases, mergers and acquisitions, equity carve-outs, spin-offs, and risk management. Previously FI 0530.

### **FNCE 6540 Investment Analysis**

**3 Credits**

This course examines the determinants of valuation for bonds, stocks, options, and futures, stressing the function of efficient capital markets in developing the risk-return trade-offs essential to the valuation process. Previously FI 0540.

### **FNCE 6545 Portfolio Management**

**3 Credits**

**Prerequisite:** FNCE 6540.

Students examine how individuals and firms allocate and finance their resources between risky and risk-free assets to maximize utility. Students use an overall model that provides the sense that the portfolio process is dynamic as well as adaptive. Topics include portfolio planning, investment analysis, and portfolio selection, evaluation, and revision. Previously FI 0545.

### **FNCE 6555 International Financial Management**

**3 Credits**

**Prerequisite:** FNCE 6530.

The globalization of international financial markets presents international investors and multinational corporations with new challenges regarding opportunities and risks. This course examines the international financial environment of investments and corporate finance, evaluating the alternatives available to market participants in terms of risk and benefits. Topics include exchange rate determination, exchange rate exposure, basic financial equilibrium relationships, risk management including the use of currency options and futures, international capital budgeting and cost of capital, and short-term and international trade financing. Previously FI 0555.

### **FNCE 6560 Global Financial Markets and Institutions**

**3 Credits**

This course examines financial markets in the context of their function in the economic system. The material deals with the complexity of the financial markets and the variety of financial institutions that have developed, stressing the dynamic nature of the financial world, which is continually evolving. Previously FI 0560.

### **FNCE 6565 Derivative Securities**

**3 Credits**

**Prerequisite:** FNCE 6540 (concurrency allowed).

This course offers in-depth coverage of financial derivative securities, such as options futures and swaps. The course focuses on the principles that govern the pricing of these securities as well as their uses in hedging, speculation, and arbitrage activities. Previously FI 0565.

### **FNCE 6570 Fixed Income Securities**

**3 Credits**

**Prerequisite:** FNCE 6540.

This course deals extensively with the analysis and management of fixed income securities, which constitute almost two-thirds of the market value of all outstanding securities. The course provides an analysis of treasury and agency securities, corporate bonds, international bonds, mortgage-backed securities, and related derivatives. More specifically, this course provides an in-depth analysis of fixed income investment characteristics, modern valuation, and portfolio strategies. Previously FI 0570.

### **FNCE 6575 Capital Budgeting**

**3 Credits**

**Prerequisite:** FNCE 6530.

This course examines the decision methods employed in long-term asset investment and capital budgeting policy. The course includes a study of quantitative methods used in the capital budgeting process: simulation, mixed integer programming, and goal programming. Students use these techniques and supporting computer software to address questions raised in case studies. Previously FI 0575.

### **FNCE 6580 Financial Risk Management**

**3 Credits**

**Prerequisite:** FNCE 6540.

This course focuses on the evaluation and management of corporate and portfolio risk. More specifically, this course examines the methods of evaluating and managing risk with the objective of contributing to value maximization. Risk assessment methodologies such as value-at-risk (VaR) and cash-flow-at-risk (CaR) are analyzed and used extensively. Previously FI 0580.

### **FNCE 6595 Research Methods in Finance**

**3 Credits**

**Prerequisite:** FNCE 6540.

This course, open to MS in Finance students only, deals extensively with applied research methods in finance, a highly empirical discipline with practical relevance in the models and theories used. The central role of risk distinguishes research methodology in finance from the methodology used in other social sciences, necessitating the creation of new methods of investigation that are adopted by the finance industry at an astonishingly fast rate. For example, methods of assessing stationarity and long-run equilibrium, as well as methods measuring uncertainty, found a home in the finance area. This course covers traditional and new research methods that are directly, and in most instances, solely applicable to finance problems. Previously FI 0595.

### **FNCE 6900 Contemporary Topics Seminar**

**3 Credits**

**Prerequisites:** FNCE 6530, FNCE 6540.

This course presents recent practitioner and academic literature in various areas of finance, including guest speakers where appropriate. Topics vary each semester to fit the interests of the seminar participants. Previously FI 0585.

**FNCE 6990 Independent Research Seminar 3 Credits**

**Prerequisite:** FNCE 6595.

This course, open to MS in Finance students only, provides participants with the opportunity to explore a financial topic of interest in depth, immersing students in detailed investigations requiring substantial research and analysis. Previously FI 0597.