

FINANCE (FNCE)

FNCE 5101. Financial Management. (3 Credits)

Overview of techniques for effectively studying financial decisions and their impact on the company. Covers the basic concepts and tools necessary to understand the financial decision-making process. The fundamental issues of timing and uncertainty are integrated into the problem of asset valuation. Financial analysis models for determining appropriate sources of capital and effective use of long term and short-term assets are discussed.

Enrollment Requirements: ACCT 5121; open only to MBA students. Not open to students who have passed FNCE 5812.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205101>)

FNCE 5151. Introduction to Economic Markets. (3 Credits)

Provides a foundation in the economics of markets, with particular application to financial markets and the role of information. Specific topics include the following: (1) the basic principles of supply, demand, profit maximization, price determination, international trade, and exchange rates; (2) the basic structure of modern, global financial markets, as an application of the basic economic principles; (3) the use of information and information technology in financial markets, including use of the internet, Bloomberg, Dow Jones and other computerized sources of information; and (4) a review of the "efficient market hypothesis."

Enrollment Requirements: Open to MBA students, others with consent. Not open to students who have passed or are currently enrolled in BADM 5170.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205151>)

FNCE 5202. Investment and Security Analysis. (3 Credits)

A rigorous foundation in risk/return analysis, asset valuation, the use of derivatives, and financial engineering techniques in risk management and overall portfolio management. Information technology is applied, including computerized financial modeling and asset management software.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205202>)

FNCE 5205. Global Financial Management. (3 Credits)

An exploration of global finance topics such as 1) international trade, 2) balance of payments, 3) exchange rate determination, 4) currency exposure, and 5) the cost of capital in global financial markets. Information technology is applied.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205205>)

FNCE 5206. Financial Institutions: Management and Capital Markets. (3 Credits)

Investigation of the structure financial services companies (banks, insurance companies, securities firms, and so forth). Emphasis is on the tools used by these firms to compete to provide basic financial services like pooling resources, managing risk, transferring economic resources, pricing information and clearing and settling payments. Financial services product development and the role of information technology in financial services, including software and data.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205206>)

FNCE 5209. Corporate Finance. (3 Credits)

A markets-oriented approach to corporate finance issues, especially capital structure and dividend policy. Modern concepts of agency theory and asymmetric information are integrated.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205209>)

FNCE 5310. Introduction to U.S. Capital Markets. (3 Credits)

Designed for students who have limited experience and knowledge about the U.S. capital markets. Students will learn about the U.S. capital markets through classroom lectures, assignments, and corporate visits/presentations.

Enrollment Requirements: Not open to students who have passed FNCE 5894 when taught as Introduction to U.S. Capital Markets.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205310>)

FNCE 5312. Financial Institutions - A Risk Management Approach. (3 Credits)

Sources of risk and management of risk through diversification, hedging and gearing, Value at Risk (VAR), Risk Management System and Basel II Accord, as well as the measurement of market risk, interest rate risk, credit risk, and other risks are addressed in this course.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205312>)

FNCE 5313. Financial Risk Modeling I. (3 Credits)

The mathematical foundation for modeling financial risk as well as key concepts in algebra, statistics, calculus, time series and econometrics principles with applications to modeling risk management as a dynamic process over time.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205313>)

FNCE 5321. Financial Risk Modeling II. (3 Credits)

A background in building advanced financial models, including lattice models, numerical methods, and Monte Carlo simulation; programming techniques to value complex derivatives and portfolios; and analyses of financial risk problems with Excel, VBA, and higher level programming languages.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205321>)

FNCE 5322. Financial Risk Management I - Equity Markets. (3 Credits)

Strategies for security selection and asset allocation and evidence on returns and volatility, trade-to-trade equity price behavior, trading volume and patterns, financial risks and optimal allocation of funds. Students will use pricing and equity derivatives in risk management as well as exotic options in equity-linked and interest rate-linked products and strategies.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205322>)

FNCE 5323. Advanced Issues and Applications in Risk Management I. (3 Credits)

One part in a two-part series on applications in Enterprise Risk Management. Introduces students to the current practice in the application of various enterprise risk management tools and techniques to real life situations. Material will be delivered through several sections, and include papers and articles written by both academics and practitioners.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205323>)

FNCE 5331. Financial Risk Modeling III. (3 Credits)

The application of advanced estimation and forecasting techniques including multivariate and time series models (ARIMA) and maximum likelihood estimation to risk management, and advanced VAR topics, including computing and implementing VAR management systems, extensions and limitations of VAR (IVAR, DVAR), and stress testing.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205331>)

FNCE 5332. Financial Risk Management II - Fixed Income Markets. (3 Credits)

Bond fundamentals and risk, models of term structure, the use of interest rate derivative in hedging interest rate risk, the use of mortgage-backed and other asset-backed securities (MBS, CMBS), and other debt instruments (CDOs, CLOs etc.) to manage credit and cash flow risks, in addition to valuation and trading strategies of pooled assets and derivative bonds using Monte Carlo and option pricing techniques.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205332>)

FNCE 5333. Applications in Enterprise Risk Management II. (3 Credits)

One part in a two-part series on applications in Enterprise Risk Management. Examines the financial regulatory environment and explores advanced issues and strategies in financial risk management. Analyzes an enterprise's governance, control environment and processes within COSO and SOX frameworks.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205333>)

FNCE 5334. Risk Management Project. (1.5 Credits)

Students must complete work on projects sponsored by businesses and other organizations. Projects vary from applied research outputs to tangible products such as software.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205334>)

FNCE 5341. Financial Risk Management III - Advanced Topics. (3 Credits)

Pricing, measurement, and management of credit risk; credit risk modeling; use of credit derivatives to manage and control credit risk; building and managing portfolios, including long/short, and market neutral strategies; measurement of credit risk, including Actuarial, Merton, and Copula function; and portfolio construction, performance evaluation, asset allocation, and portfolio risk management (VAR, Hedging, Portfolio insurance).

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205341>)

FNCE 5343. Legal and Ethical Issues in Financial Risk Management. (3 Credits)

An introduction to the federal laws regulating financial products and the internal controls necessary to comply with those laws. The federal regulation of securities and derivatives and the market participants engaged in those businesses. Participants study safety and soundness regulation of other major financial institutions, including commercial banks, bank holding companies, and insurance underwriters. Examination of the compliance activities and internal controls that financial firms need to maintain to comply with federal law particularly the Sarbanes-Oxley Act. Includes an overview of new developments in financial regulation and compliance.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205343>)

FNCE 5344. Advanced Issues and Applications in Risk Management III. (1.5 Credits)

A review of the Financial Risk Management program. Reviews the accounting requirements associated with asset valuation and income recognition of complex portfolios that utilize advanced hedging techniques. Analyzes an organization's control environment and processes within COSO and SOX frameworks and examines the control practices that organizations use to help ensure the integrity of information provided by its accounting systems. Tax-related issues and Basel II are also discussed.

Enrollment Requirements: Not open for credit to students who have passed FNCE 5894 when taught as Capstone in Financial Risk Management.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205344>)

FNCE 5351. Excel Visual Basic Applications in Financial Risk Management. (3 Credits)

The advanced knowledge of financial risk management to build risk measurement and management tools by using Excel VBA. Course assumes prior knowledge of the VBA language. It provides an advanced learning forum for students to develop specific applications on their own. These deliverable risk management applications are graded.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205351>)

FNCE 5352. Financial Programming and Modeling. (3 Credits)

The use of MATLAB, R, and SAS for financial programming and modeling. Students pick up materials such as programming basics, SQL, database operations, file operations, graphical user interface design, object-oriented programming, XML, Component Object Model (COM) client and server, and application programming interface (API). Fundamental concepts are reviewed. Students learn modeling techniques such as Monte-Carlo simulation, binomial and trinomial trees, Black-Scholes, finite difference methods, constrained and unconstrained optimization, linear and non-linear programming, heuristic optimization, mean-variance, Value at Risk, data envelopment analysis (DEA), and data mining techniques applied in risk management, and apply these in financial contexts. Construction of various applications, for example portfolio optimization with live data from the internet using various methods, option pricing using Monte-Carlo, binomial trees, Black-Scholes, asset pricing models, capital budgeting, efficiency evaluation, finding betas of stocks, risk evaluation using data mining techniques, etc., across several programming languages.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205352>)

FNCE 5353. Enterprise Risk Management (ERM). (3 Credits)

A real world approach for students and real-world professionals to use in determining how business risk can affect top priority business strategies and how to develop action plans for addressing those risks through ERM. The steps necessary to achieve an effective ERM process through a unique methodology for identifying and prioritizing risks across business functions. An initial set of specific risks many functions may currently face. Includes tools, sample reports and case studies providing a practical guide for implementing ERM. Links ERM to the corporate strategy which is well illustrated through case studies. There will be a detailed discussion of the value of ERM to the enterprise and its various stakeholders.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205353>)

FNCE 5399. Independent Study. (1-6 Credits)

May be repeated for credit

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205399>)

FNCE 5408. Valuation of Financial Assets. (3 Credits)

Developing models for asset allocation, and security selection to construct a diversified portfolio. Analysis of industry segments, and valuation of common stocks and bonds. Topics include analysis of business models, measurement of risk and cost of capital, valuation of common stocks, and valuation and measurement of risk of bonds and bond funds. Preparation of analysts' reports is an integral part of the course.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205408>)

FNCE 5409. Advanced Valuation and Portfolio Management. (3 Credits)

Starts with performance measurement, and then discusses various trading and risk management strategies, and concludes with a discussion of the impact of accounting process, and corporate governance on valuation. Technical analysis is briefly discussed at the end. Delivered primarily through discussion of cases.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205409>)

FNCE 5504. Options and Futures. (3 Credits)

Analysis and valuation of speculative securities including options and futures with emphasis on their use for hedging and speculative motives. Major valuation models are discussed and applications of contingent claim valuation framework to corporate finance problems are also explored.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205504>)

FNCE 5512. Fixed Income Instruments and Markets. (3 Credits)

Examines contemporary portfolio management of fixed income institutional investors, issuers, and broker-dealers. Assesses current practice and presents a theoretical framework for anticipating change. Coverage includes pricing, assessment of return and risk, and the development of overall strategies, for these markets: government, corporate, municipal, and international bonds; mortgage-related and other asset-backed securities; and derivative securities including futures, options, swaps, and other interest rate contracts.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205512>)

FNCE 5532. Real Estate Investment and Portfolio Management. (3 Credits)

Overview of real estate investment decision-making. Topics include: risk-return analysis of alternative types of real estate investments; leases, operating costs, and tax consequences; valuation techniques, including discounted cash flow and option pricing; real estate portfolio management; and alternative forms of equity securitization such as real estate investment trusts.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205532>)

FNCE 5533. Real Estate Capital Markets. (3 Credits)

Structure and operation of the mortgage market. Topics include the identification, measurement and management of risk from the perspective of borrower, lender, and investor. Stresses the integration of the real estate debt markets with the global capital market, and considers the role and impact of mortgage-backed securities for residential and commercial real estate lending.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205533>)

FNCE 5610. Personal Financial Planning. (3 Credits)

For the professional working in the area of financial services as well as for one's personal planning. It is the application of finance theory to the individual and family. This integrated approach covers lifetime cash flows, asset accumulation and allocation, debt management, retirement planning, and risk management.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205610>)

FNCE 5611. Financial Modeling. (3 Credits)

A hands-on use of computerized decision aids to analyze a variety of financial problems. Applications will be drawn from corporate financial planning, modern portfolio theory, options pricing, dynamic trading, and so forth. No computer experience is required; this course will help students develop the necessary programming skills to build fairly sophisticated models.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205611>)

FNCE 5710. Introductions to Financial Models. (3 Credits)

Quantitative introduction to time, risk, and arbitrage valuation models used in equity, credit, and derivatives markets. Covered models include discounted cash flow models, equity valuation models, asset pricing models, term structure models, binomial trees and other derivatives models. Students will be introduced to portfolio construction, technical analysis, and to programming using Python. Students new to Finance are encouraged to complete the online Bloomberg's BML very early in the course or, preferably, before taking the course, for an introduction and overview of financial markets and institutions.

Enrollment Requirements: Open to MS in FinTech students, others with consent. Rec prep: Students new to Finance are encouraged to complete the online Bloomberg's BML early, preferably, before taking the course, for an intro and overview of financial markets and institutions.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205710>)

FNCE 5711. Foundations of FinTech. (3 Credits)

Overview of Fintech. It consists of three modules. Module A: Fintech's four thematic areas: Paying for goods and services, Savings and investment products, Credit and loan products, and Managing risk. Module B: Fintech's four enabling technologies: Distributed computing, AI and big data, Cryptography and Blockchain. Module C: Fintech's four perspectives: The disruptive companies, The incumbent financial institution, Societal effects and regulatory responses, and The private equity investor.

Enrollment Requirements: Open to MS in FinTech students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205711>)

FNCE 5712. FinTech Economics and Business Models. (3 Credits)

This course addresses the economics within the Fintech ecosystem, its various business models, and value creation with emphasis on the competitive landscape in Payments, Wealth management, Crowdfunding and Lending. Topics include contract theory and game theory.

Enrollment Requirements: FNCE 5710 and 5711. Open to MS FinTech students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205712>)

FNCE 5720. Cryptocurrencies. (1.5 Credits)

This course examines the BTC ecosystem, XRP, ETH, tokens and ICOs and CBCC.

Enrollment Requirements: OPIM 5513, which may be taken concurrently. Open to MS in FinTech students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205720>)

FNCE 5721. Blockchain Applications. (3 Credits)

This course expands on PKC, data structures, Consensus algorithms, data structures - Merkle trees, Consensus Algorithms. Explores uses of blockchain as a general purpose technology.

Enrollment Requirements: FNCE 5711, 5720; and OPIM 5513. Open to MS in FinTech students, others with consent.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205721>)

FNCE 5722. Algorithmic and High Frequency Trading. (3 Credits)

Quantitative trading models implemented on computer systems for automatic execution. Examines popular trading strategies. Emphasizes hands-on experience; students will use Python to write, back test, and refine strategies. Focus on finance machines and automatic bots as essentials part of the current trading infrastructure in the U.S. market. Exposes students to the world of high frequency trading and market making. Intent is to be less theoretical but more practical so that students will experience firsthand some of the issues that high frequency trading system operators have.

Enrollment Requirements: FNCE 5710. Open to MS in FinTech students, others with consent. Corequisite: OPIM 5512.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205722>)

FNCE 5757. FinTech Workshop. (3 Credits)

Students apply fintech skills learnt to identify a potentially disruptive venture in the financial services industry. Students will formulate a comprehensive professional business plan and proposal. Elements of valuations in the venture capital markets are discussed.

Enrollment Requirements: Open to MS in FinTech students, others with consent. Corequisite: FNCE 5712.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205757>)

FNCE 5894. Seminar. (1-3 Credits)

Investigation and discussion of special topics in finance, risk and insurance and/or real estate and urban economic studies.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

May be repeated for a total of 12 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205894>)

FNCE 5895. Special Topics in Finance. (1-3 Credits)

Faculty-student interaction on a one-to-one basis involving independent study of specific areas of finance, risk and insurance, and/or real estate and urban economic studies. Emphasis, selected by the student, may be on theoretical or applied aspects. A written report is required.

Enrollment Requirements: FNCE 5101 or FNCE 5182; open to MBA students, others with consent.

May be repeated for a total of 12 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%205895>)

FNCE 6200. Investigation of Special Topics. (1-2 Credits)

Enrollment Requirements: FNCE 5508.

May be repeated for a total of 12 credits

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206200>)

FNCE 6201. Introduction to Finance Theory and Evidence. (3 Credits)

Efficient market hypothesis, utility theory, portfolio theory, CAPM, arbitrage pricing theory, option pricing, capital structure, tax theory, capital budgeting under uncertainty, and current empirical studies.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206201>)

FNCE 6202. Corporate and Institutional Finance. (3 Credits)

Topics include: information asymmetry, agency, internal capital markets, governance, market microstructure, moral hazard / adverse selection. Concepts are applied in both corporate and financial institution settings.

Enrollment Requirements: FNCE 5508.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206202>)

FNCE 6203. Theory of Financial Markets and Valuation. (3 Credits)

Fundamental pricing theorems, state preference theory, martingale pricing, dominance, spanning and arbitrage restrictions, consumption models, and continuous-time approaches to asset pricing, interest rate models, and derivatives pricing.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206203>)

FNCE 6204. Empirical Methods in Finance Research. (3 Credits)

Topics include: predictability of asset prices, time series models of market microstructure, event study methodology, tests of asset pricing models and derivative pricing models, market efficiency, volatility of asset returns, and term structure interest rates.

Enrollment Requirements: FNCE 5508.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206204>)

FNCE 6205. Advanced Corporate Finance. (3 Credits)

This is the second PhD-level class in corporate finance. It builds upon FNCE 6202 and examines further developments in the area. The goal is to bring students to the frontier of the knowledge and corporate finance research, so that they can start doing their own research. We start by discussing a core issue in empirical corporate finance - endogeneity and various approaches to address it. We will then cover long-time important topics including security issuance, mergers and acquisitions, behavioral finance, and private equity. Finally, we will introduce latest and emerging areas such as textual analysis and machine learning, climate finance, and household finance. We will discuss both the theoretical and empirical aspects of these topics.

Enrollment Requirements: FNCE 6202; Open only to second year Finance PhD students.

View Classes (<https://catalog.uconn.edu/course-search/?details&code=FNCE%206205>)