FINANCE (FIN)

FIN Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/FIN)

Courses

FIN 199 Undergraduate Open Seminar credit: 0 to 5 Hours. Approved for letter and S/U grading. Course may be repeated for credit.

FIN 221 Corporate Finance credit: 3 Hours. Introductory study of corporate financial management, in particular how the financial manager's choices add value to shareholder wealth through investment financing and operating decisions. Prerequisite: Completion of ECON 102 or ECON 103.

FIN 230 Introduction to Insurance credit: 3 Hours. Introductory course on the role of insurance in society; covers insurance terminology, common personal insurance policies (auto, health, life and homeowners) and current issues.

FIN 232 Intro to Wealth Management credit: 3 Hours. Creating a sound personal financial plan and issues related to becoming a financial planner. Course enrollment is limited to non-College of Business students and College of Business students with freshman or sophomore standing. Credit will not satisfy Finance major requirements. Credit is not given for both FIN 232 and ACE 240.

FIN 234 Fundamentals of Real Estate credit: 3 Hours. A survey of real estate finance, appraisal, investment, law, brokerage, management, development and economics. Special attention is given to the analysis of aggregate real estate and mortgage markets, to the individual transactions within these markets, and to the legal and institutional factors which affect these markets. Prerequisite: ECON 102.

FIN 300 Financial Markets credit: 3 Hours. Theory and applications associated with the functioning of financial markets to include the conceptual foundations of portfolio theory, risk management, and asset valuation. The stock, money, bond, mortgage, and futures and options markets are examined. Prerequisite: FIN 221.

FIN 321 Advanced Corporate Finance credit: 3 Hours. Theories of firms' investment and financing decisions are covered. Topics include dividend policy, capital budgeting, capital structure, bankruptcy, long-term debt and leasing decisions. Prerequisite: FIN 300.

FIN 390 Finance Academy credit: 1 Hour. The Finance Academy is an enrichment program for outstanding undergraduate Finance majors. A select program that focuses on developing future business leaders via enhanced academic and career opportunities. Students are normally invited to participate by the faculty during their junior year, when they are enrolled in FIN 300. If inducted, students participate throughout their junior and senior years. Approved for letter and S/U grading. May be repeated in separate terms. Course will not satisfy Finance major requirements. Prerequisite: Induction into the Finance Academy.

FIN 391 Investment Banking Academy credit: 1 Hour. A diversified curriculum designed to prepare students for a successful career in investment banking; course incorporates peer mentorship, guest lectures (from bankers, accountants, private equity associates and hedge fund analysts), a case competition and a field trip. Course will not satisfy Finance major requirements. May be repeated for a maximum of 6 hours in separate terms. Prerequisite: Admission by application only.

FIN 392 Investment Management Academy credit: 1 Hour. Overview of security analysis with the objective of how to value an investment proposition for inclusion in a portfolio of securities managed by students in the class. Focus will be in areas of fundamental securities analysis with the emphasis on equity valuation. Course will not satisfy Finance major requirements. May be repeated to a maximum of 6 hours in separate terms. Prerequisite: Admission by application only. Primarily for Finance majors with sophomore standing or above who show interest in pursuing their CFA credential.

FIN 411 Investment & Portfolio Mgmt credit: 3 Hours. Current theories of portfolio management are covered in considerable detail to provide a conceptual framework for the evaluation of investment strategies. Applications and implementation are covered in depth, including performance evaluation and international diversification. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300.

FIN 412 Options and Futures Markets credit: 3 Hours. Introduction of options and futures markets for financial assets; examination of institutional aspects of the markets; theories of pricing; discussion of simple as well as complicated trading strategies (arbitrage, hedging and spread); applications for asset and risk management. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 413 Financial Engineering credit: 3 Hours. This course will present and analyze modern tools for identification, measurement, and management of financial risk faced by corporations and institutional investors; in particular as related to the application of futures, forwards, options, swaps, and other derivatives. The focus will be evenly split between theoretical models and practical applications, and will include careful consideration of parameter estimation and numerical implementation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 414 Urban Economics credit: 3 or 4 Hours. Same as ECON 414. See ECON 414.

FIN 415 Fixed Income Portfolios credit: 3 Hours. Conceptual foundations and implementation of strategies for the selection, evaluation, and revision of portfolios of fixed-income financial assets (bonds). 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 418 Financial Modeling credit: 3 Hours. The objective is to learn the fundamentals and practice building financial models using Microsoft Excel. By the end of the term, each student should be able to develop an understanding of any financial relationship and build that financial relationship into a model using the built-in functions of Excel. Financial modeling, by definition, requires significant work outside of the classroom. Models are introduced, demonstrated, and reviewed in class, but each student is expected to research and collect data, and to construct the models, prior to each week's class meeting. 3 undergraduate hours. 3 graduate hours. Prerequisite: FIN 300 and FIN 321, or consent of instructor.

Information listed in this catalog is current as of 04/2018
FIN 419  Real Client Managed Portfolios  credit: 3 Hours.
Applies academic topics on financial markets, security analysis/valuation and portfolio management to hands-on investment management. Students will form and review objectives, constraints, and investment policy as it relates to the client's money under management. They will purchase securities, monitor performance of the portfolio, and make recommendations for any adjustments to the holdings. They will be fully educated and responsible to the fiduciary and ethical standards of professional money management as guided by the CFA Institute. 3 undergraduate hours. No graduate credit. May be repeated to a maximum of 9 hours. Prerequisite: FIN 321 or consent of instructor.

FIN 422  Cases in Corporate Finance  credit: 3 Hours.
Course totally devoted to the study of financial management cases, provides students a hands-on learning experience. The case work helps students to develop their analytical and interpretative skills in solving unstructured real world problems. The theoretical concepts and tools learned in the introductory finance courses provide the foundation for the case studies. Topics discussed include financial forecasting and working capital management; capital budgeting and cost of capital; and capital structure, dividend policy, corporate financing, financial restructuring, financial distress, mergers, acquisitions and firm valuation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 and FIN 321.

FIN 423  Financing Emerging Businesses  credit: 3 or 4 Hours.
The study of the business environment, alternative methods of organization and financing, use of financial statements as a management tool, valuation methods and approaches to ethical dilemmas from the perspective of an owner-manager. 3 or 4 undergraduate hours. Prerequisite: FIN 300 or consent of instructor.

FIN 424  Mergers and Acquisition  credit: 3 Hours.
Focusses on identifying ways to increase firm value through mergers and acquisitions (M&A) and corporate restructurings. Surveys the drivers of success (failure) in M&A transactions and develop your skills in the design and evaluation of transactions. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 425  Private Equity/Venture Capital  credit: 3 Hours.
Provides students with an understanding of the nature of the private equity market, the principal participants in this market, and how they function. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 321.

FIN 431  Property-Liability Insurance  credit: 3 or 4 Hours.
Examines in detail the functions of property-liability insurers, including marketing, underwriting, claims, ratemaking and administration, and the major current issues facing this industry. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 230.

FIN 432  Managing Fin Risk for Insurers  credit: 3 or 4 Hours.
Introduces basic concepts in financial economics used in the analysis and management of financial risks, with an emphasis on the applications by insurers and pension plans; topics include decision making under uncertainty, economic statistics, deterministic and stochastic interest rate models, derivative securities, valuation, binomial models and option pricing models. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 300; either FIN 230 or FIN 435.

FIN 433  Corporate Risk Management  credit: 3 or 4 Hours.
Case study course examining how corporations deal with pure risk. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 221, FIN 431, and FIN 434.

FIN 434  Employee Benefit Plans  credit: 3 Hours.
Studies the purpose, structure, and financial aspects of employee benefit plans, including pensions, health insurance, life insurance, and disability plans. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

FIN 435  Personal Wealth Management  credit: 3 Hours.
Studies personal wealth management techniques with an emphasis on life insurance products; covers life insurance policies, annuities, trusts, buy-sell arrangements, investing in stocks, bonds and mutual funds, banking and borrowing, purchasing residential and commercial real estate, income and estate taxation and management of personal financial portfolio. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300.

FIN 436  Real Estate Investment  credit: 3 Hours.
An approach to the evaluation of real estate investment opportunities. Begins with the identification of the investor's goals and ends with an investment decision. Considers legal, physical, locational, and financial constraints, aggregate real estate and financial markets, tax considerations and investment criteria. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of the instructor, FIN 241 is recommended but not required.

FIN 446  Real Estate Financial Markets  credit: 3 Hours.
Discusses real estate financing techniques and the secondary market for real estate financial assets including residential and commercial mortgage-backed securities (RMBS and CMBS). 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor, FIN 241 is recommended but not required.

FIN 447  Real Estate Development  credit: 3 or 4 Hours.
Provides students with an exposure to the real world of real estate through a series of lectures by real estate professionals focused primarily on retail real estate development. A side benefit of the class will be to help improve the career choices that they make. 3 undergraduate hours. 4 graduate hours. Prerequisite: FIN 221 or FIN 241.

FIN 451  Intl Financial Markets  credit: 3 Hours.
This course covers the three major international financial markets; the foreign exchange market, the eurocurrency market, and the international equity and bond market. The course looks at international financial decisions including operations, structure and valuation. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 and FIN 321.

FIN 461  Financial Intermediation  credit: 3 Hours.
Financial intermediaries survey of the structure, functions, regulation, and risk management activities of financial intermediaries; central banking and monetary policy effects on financial intermediaries. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.
FIN 463 Investment Banking  credit: 3 Hours.
The mechanics of financial statement analysis and ratio analysis; development of investment banking/corporate finance valuation models (including DCF, leveraged buyout and merger models) in order to determine the intrinsic value of companies and price investment banking deals. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 (FIN 300 is waived if student is admitted to FIN 391 IBA). Priority to finance majors.

FIN 464 Investment Management  credit: 3 or 4 Hours.
Students learn the fundamental equity research process including valuation and market and industry analysis. Students then select their own multi-asset portfolios using an online trading simulation software program. The course pays special attention to risk management. Ultimately, students implement hedging strategies based on real returns over the course of the semester. 3 undergraduate hours. 4 graduate hours. Prerequisite: FIN 300. Priority given to finance majors.

FIN 490 Special Topics in Finance  credit: 1 to 3 Hours.
1 to 3 undergraduate hours. No graduate credit. May be repeated in the same term to a maximum of 6 hours. May be repeated in subsequent terms to a maximum of 9 hours. Course will not satisfy Finance major requirements. Prerequisite: FIN 300 or consent of instructor.

FIN 494 Senior Research  credit: 2 to 4 Hours.
Research and reading course for students concentrating in finance, insurance, urban land economics, or related areas who meet one of the following requirements: (1) have a cumulative grade-point average of 3.0 or better; (2) have attained Honors Day recognition in the junior year; or (3) have consent of instructor. May be taken by students in the college honors program in partial fulfillment of the honors requirements. 2 to 4 undergraduate hours. No graduate credit. May be repeated as topics vary. Prerequisite: Senior standing.

FIN 495 Senior Research  credit: 2 to 4 Hours.
Research and reading course for students concentrating in finance, insurance, urban land economics, or related areas. May be taken by students in the college honors program in partial fulfillment of the honors requirements. 2 to 4 undergraduate hours. No graduate credit. Prerequisite: Senior standing; and cumulative grade-point average of 3.0 or better, Honors Day recognition in the junior year, or consent of instructor.

FIN 500 Introduction to Finance  credit: 2 or 4 Hours.
Introduction to financial management and decision making. A customized course, designed to provide a survey of finance for graduate students who do not necessarily have previous training in the disciplines. Different sections of the course will cover different sets of topics. Prerequisite: Junior standing or consent of department.

FIN 501 Financial Economics  credit: 2 or 4 Hours.
Theory and logic of microeconomics, taught with applications to financial markets. First half of course covers the way in which efficient markets work to allocate resources; second half covers the way in which markets fail. Also includes selected topics in macroeconomics. Approved for letter and S/U grading. May be repeated in the same or separate terms to a maximum of 4 hours if topic varies.

FIN 502 Quantitative Finance  credit: 2 or 4 Hours.
Quantitative methods used for financial decision making. Topics include elements of statistics, mathematics, and specific analytical tools used in the study and practice of finance. Approved for letter or S/U grading. May be repeated in the same or separate terms to a maximum of 4 hours. Material may be split into two 8-week 2-hour modules, either across semesters or within the same semester, if so, credit is not given for taking the same half twice. Prerequisite: Graduate standing.

FIN 511 Investments  credit: 2 or 4 Hours.
Introduction to investment analysis, including the theory and implementation of portfolio theory; empirical evidence on the performance of financial assets; evaluation of portfolio investment strategies; and the extension of diversification to international markets. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 512 Financial Derivatives  credit: 4 Hours.
Introduction to options, futures, swaps and other derivative securities; examination of institutional aspects of the markets; theories of pricing; discussion of simple as well as complicated trading strategies (arbitrage, hedging, and spread); applications for asset and risk management. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 513 Financial Engineering I  credit: 4 Hours.
Provides an introduction to modern techniques for pricing options, swaps, and related financial instruments; the use of such instruments in managing financial risk; and the measurement and management of their risks. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 514 Financial Engineering II  credit: 4 Hours.
Presents the main ideas and techniques of modern option pricing theory, including: the Black-Scholes-Merton analysis; risk-neutral probabilities and the probabilistic solution; numerical techniques for computing option prices; an introduction to term structure modeling; and perhaps other topics, at the discretion of the instructor. Prerequisite: Prior or concurrent registration in FIN 513 or consent of instructor.

FIN 515 Fixed Income Portfolios  credit: 2 or 4 Hours.
Conceptual foundations and implementation of strategies for the selection, evaluation, and revision of portfolios of fixed-income financial assets (bonds); examination of related research. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 516 Term Structure Models  credit: 4 Hours.
Extensive coverage of several models of the term structure of interest rates, including their implementation, calibration, and use in valuing interest rate derivatives. Will include applications of both Monte Carlo methods and finite-difference or "tree" methods. Approved for letter and S/U grading. Prerequisite: FIN 500 and FIN 512, or equivalents.

FIN 517 Adv Topic in Fin Engineering  credit: 4 Hours.
Discussion of advanced topics of current interest, based on evolving conditions and in the marketplace. Topics may include new valuation models and/or financial instruments, issues in risk management, trading strategies of current interest, and regulatory and public policy issues. Approved for letter and S/U grading. Prerequisite: FIN 500 and FIN 512, or equivalents.

FIN 518 Financial Modeling  credit: 4 Hours.
The objective is to learn the fundamentals and practice building financial models using Microsoft Excel. By the end of the term, each student should be able to develop an understanding of any financial relationship and build that financial relationship into a model using the built-in function of Excel. Financial modeling, by definition, requires significant work outside of the classroom. Models are introduced, demonstrated, and reviewed in class, but each student is expected to research and collect data, and to construct the models, prior to each week's class meeting. Prerequisite: MSF students only.
**FIN 519 Gen Equ Env Tax Policy**  credit: 4 Hours.
Focusses on how to build and use analytical general equilibrium models to do research. Students will replicate and extend existing G.E. models with general production and demand functions that are differentiated to find closed-form solutions for the incidence of the tax, including changes in all factor prices, input quantities, outputs, prices, and welfare of each group. The primary examples are drawn from environmental tax policy, but the method is equally useful for analysis of non-tax policies and other economic problems. Same as ECON 546. Prerequisite: Microeconomics and Econometrics at graduate level.

**FIN 520 Financial Management**  credit: 4 Hours.
Introduction to financial management and decision making. Topics include risk-return relationships for financial securities; financial statement analysis and forecasting; working capital management; capital budgeting and the resource allocation process; capital structure and the cost of capital; dividend policy. Prerequisite: Enrollment in the Executive MBA, MSBA, or MS program.

**FIN 521 Advanced Corporate Finance**  credit: 4 Hours.
Addresses both the theoretical and applied aspects of firms' financing decisions; topics include capital structure and cost of capital theories; mergers, acquisitions and leveraged buyouts; options, warrants, and convertibles; venture capital and initial public offerings; and pensions. Prerequisite: FIN 520, plus either ECON 506 or BADM 572 or concurrent registration in either course; or MBA 505 - Section G (Finance II); or consent of instructor.

**FIN 522 Cases in Financial Strategy**  credit: 4 Hours.
Course focuses on financial management cases. Provides students with an active learning experience. Case work is based on concepts learned in introductory corporate finance. Topics discussed include measuring and interpreting cash flow performance, financial forecasting and turnaround management; capital investment and cost of capital; capital structure, dividend policy; and firm valuation. Prerequisite: FIN 520, plus either ECON 506 or BADM 572 or concurrent registration in either course; or MBA 505 - Section G (Finance II); or consent of instructor.

**FIN 524 Mergers and Acquisitions**  credit: 4 Hours.
The primary objective of this course is to give students experience in valuing firms. While the primary focus of the course is on mergers and acquisitions, the course will also cover topics such as initial public offerings, leveraged buyouts, spin-offs, and divestitures. Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

**FIN 526 Enterprise Risk Management**  credit: 4 Hours.
The application of basic risk management principles to all risks facing the organization. Integrates hazard, financial, strategic and operational risks under a single framework. Provides a conceptual framework for making risk management decisions to increase business value. The course will includes a review of the legal and regulatory environment that sets the stage for Enterprise Risk Management, cover the tools used for risk analysis, examine data integration processes and show how risk measurement relates to strategic and tactical business decisions.

**FIN 527 Mergers & Acquisitions Topics**  credit: 2 Hours.
This course focuses on identifying ways to increase firm value through mergers and acquisitions (M&A) and corporate restructurings. We will develop your skills in the design and evaluation of transactions. Specific topics addressed in the course are the valuation of companies, structuring of transactions, deal tactics and strategy, valuation of leveraged buyouts, and spin-offs/carve-outs. We will also delve into issues of law, accounting and taxation and how they affect the structuring and outcome of merger transactions. Knowledge about M&A is an important component of any corporate finance professional and is the foundation for effective work in a wide range of fields including corporate development, investment banking, consulting, and advising senior management. 2 graduate hours. No professional credit.

**FIN 530 Foundations in Risk Management**  credit: 2 Hours.
This course introduces risk management including basic concepts and techniques of pure risk and financial risk management. Corporate hazard risk management including insurance and securitization of pure risks will be covered in detail. Insurer risk management will be examined including reinsurance, loss reserving, underwriting of risks, and catastrophic risk management. Students will also be introduced to Enterprise Risk Management (ERM). 2 graduate hours. No professional credit. Prerequisite: MSF and MBA students only.

**FIN 531 Government Insurance Programs**  credit: 2 Hours.
Government insurance programs – including Social Security, Medicare and Medicaid, unemployment and disability insurance, terrorism insurance, and disaster relief – currently account for more than half of U.S. federal spending. These programs, which for decades have collectively been growing more quickly than the U.S. economy, represent a significant share of an employer’s compensation expenses and significantly impact household budgets. This course will examine how the design of these programs affects economic efficiency, growth, business competitiveness, and social well-being. An important theme of the course will be the role of imperfect information and aggregate or long-term risks of insurance market failures, and conditions under which the government can or cannot remedy these failures. Prerequisite: MAS BPP Concentration.

**FIN 541 Real Estate Fundamentals**  credit: 4 Hours.
Discusses the theory and practice of real estate and urban land economics; emphasizes real estate market analysis, finance, appraisal, and investment. 4 graduate hours. No professional credit. Prerequisite: FIN 520, plus ECON 302, ECON 500, or equivalent; or MBA 505 - Section G (Finance II); or consent of instructor.

**FIN 544 Urban Real Estate Valuation**  credit: 4 Hours.
The terminology, theory and techniques of real estate valuation (appraisal); a modern view of the three approaches to estimating value - sales comparison, cost and income. Special requirements include local field trips to appraise at least one single-family property and one income property. 4 graduate hours. No professional credit. Prerequisite: FIN 541 is recommended but not required.

**FIN 545 Real Estate Investment**  credit: 4 Hours.
Real estate accounts for one-third of the world’s capital assets. This course provides students with a comprehensive understanding of real estate valuation, cycles, markets, investments, and decision-making. The bulk of the course covers income-producing commercial property, although we will also discuss residential housing. This course provides a unified finance based framework to answer real estate investment decision making problems in the real world. 4 graduate hours. No professional credit. Prerequisite: FIN 541 is recommended but not required. Graduate students only.
FIN 546 Real Estate Financial Markets credit: 4 Hours.
This is an applied course in real estate investment that focuses on the
U.S. mortgage and asset-backed securities markets. The course will
review the multi-trillion dollar mortgage and asset-backed bond markets.
We will discuss the fundamentals of securitization, and strategies to
structure deals. We will also consider real estate investment trusts
(REITs), collateralized debt obligations (CDOs) and credit default swaps
(CDS). The course will develop analytical skills in deal structuring and
pricing, and offer all students an opportunity to develop their business
skills through case discussions. 4 graduate hours. No professional credit.
Prerequisite: FIN 541 recommended but not required. Graduate students
only.

FIN 551 International Finance credit: 4 Hours.
Explores the characteristics of the international financial market and
examines various aspects of corporate financial management.
Topics may include international parity conditions, exchange rate risk
management, country risk, cross-border investment analysis, multi
national firm budgeting, hedging in foreign currency markets, accessing
international financial markets for financing, and competitive strategy
in a global marketplace. Prerequisite: FIN 520; or MBA 505 - Section G
(Finance II); or consent of instructor.

FIN 561 Financial Intermediation credit: 4 Hours.
Studies financial intermediation emphasizing analysis of problems faced
by commercial bank managers. The three main areas covered are: the
role of financial intermediation and its relation to the macro-economy,
information technology, and government regulation; examination of the
problems of pricing and evaluating the risk of bank financial services
such as loans, loan commitments, and swaps; and consideration of bank
portfolio risk management. Prerequisite: FIN 520; or MBA 505 - Section G
(Finance II); or consent of instructor.

FIN 562 Macrofinance credit: 4 Hours.
Overview of the workings of the financial sector of the macro
economy; includes the roles of financial institutions, financial markets,
macroeconomic policies, interest rates, and the flows of funds.
Prerequisite: FIN 520; or MBA 505 - Section G (Finance II); or consent of instructor.

FIN 563 Investment Banking credit: 4 Hours.
This course will provide key building blocks necessary for a career in
investment banking, valuation and other related fields. It is designed to
provide a practical application of financial statement analysis, modeling,
valuation, and presentation skills commonly performed by industry
professionals. The course has three major parts. The first focuses on
the mechanics of financial statement analysis, ratio analysis, and
financial model building. The second applies the financial statements
and forecasts within the context of company valuation, utilizing common
industry techniques. In the third part of the course, we will employ these
valuation techniques in common investment-banking deliverables such as
pitch books and fairness opinions. 4 graduate hours. No professional
credit. Prerequisite: Previous introductory accounting and finance
coursework recommended. Graduate students only.

FIN 556 Algorithmic Market Microstructure credit: 4 Hours.
This course introduces the modern theoretical, empirical and institutional
foundations of market microstructure and trading activity, with an
emphasis on applications to algorithmic and high-frequency trading.
The first part of the course addresses market microstructure and the
algorithmic implementation of traditional microstructure-inspired tasks
such as minimizing execution costs. The second part of the course
proceeds to examine actual algorithmic strategies, and ultimately high-
frequency trading. Recurrent themes throughout the course will be
the use of economic theory to simplify computationally challenging
problems, and the use of theory-driven structural models to construct
more robust trading algorithms. 4 graduate hours. No professional credit.
Prerequisite: Restricted to students in the MS in Financial Engineering
program.

FIN 567 Financial Risk Management credit: 4 Hours.
This course covers selected topics in financial risk management. The
focus is on statistical techniques used in financial risk management
rather than risk management practice, cases, or valuation issues. The
course will cover the value-at-risk (VaR) measure and expected shortfall,
statistical techniques useful to model financial market returns, and
techniques used to model the joint distribution of defaults on fixed
income instruments. The course will also cover additional topics such
as retail credit risk, risk budgeting, and economic capital modelling.
4 graduate hours. No professional credit. Prerequisite: FIN 500 or 511;
IE 522 or FIN 502; FIN 512 (concurrent enrollment allowed); or consent of
instructor.

FIN 568 Behavioral Finance credit: 2 Hours.
There is increasing evidence that the financial decisions of at least some
investors are affected by various behavioral biases that do not follow
from traditional portfolio choice models. This course will highlight and
analyze key findings from this research and consider implications of this
observed behavior for individual investors and money managers. The
results are also of interest for managers of firms and human resource
departments. 2 graduate hours. No professional credit. Prerequisite:
Restricted to MSF and MBA Students.

FIN 570 Business and Public Policy credit: 4 Hours.
The role of government and its effects on business in a market economy;
critical examination of tax rules, public spending and insurance programs,
social security, health policy, environmental policy, and other regulations
on businesses.

FIN 571 Retirement Policy credit: 2 Hours.
The retirement landscape in the US - including public policy, retirement
plan design, and individual behavior - is constantly changing and
evolving. This course will examine the economic, financial, legal,
regulatory, political, and human resource issues involved with designing
and implement both public and private retirement plans, including Social
Security, pensions and retirement savings plans. Credit is not given for
both FIN 434 and FIN 571. Prerequisite: MAS BPP Concentration.

FIN 572 Health Care Policy credit: 2 Hours.
Costly advances in health technology, together with an aging population,
are making health care an increasingly important issue for individuals,
firms, and governments. This course examines the economic, legal, and
regulatory issues involved with implementing both public and private
health plans, including Medicare, Medicaid, and employer-sponsored
plans. Credit is not given for both FIN 434 and FIN 572. Prerequisite: MAS
BPP Concentration.
FIN 573  Competition Policy  credit: 2 Hours.
While perfect competition is a useful model, it often fails to capture much of what is observed in the real world. This course examines interaction of firms and consumers in markets that are not perfectly competitive and reviews policies that aim to increase efficiency in these markets. Topics covered will include oligopoly, anti-competitive practices, price discrimination, and antitrust regulation. Prerequisite: MAS BPP Concentration.

FIN 574  Individual Tax Policy  credit: 2 Hours.
Contentious public debate surrounds how to tax individuals fairly and efficiently. This course will provide the tools to design and evaluate tax policies. Topics will include measuring how taxes affect individual behavior including labor supply, savings, and portfolio decisions; the efficiency cost of taxation; understanding who bears the true economic burden of taxes; measuring the progressivity of a tax system; and the pros and cons of alternative approaches to taxation. Prerequisite: MAS BPP Concentration.

FIN 575  Business Tax Policy  credit: 2 Hours.
Government needs revenue and taxes people, but why also tax business? We review the pros and cons of a separate corporate taxes system, the interaction of corporate and personal taxes, the inefficiencies of capital misallocations, and economic incidence (who really bears the burden of a corporate income tax). We also review pros and cons of other taxes on capital income such as interest, dividends, capital gains, rental income, and foreign source-income. Prerequisite: MAS BPP Concentration.

FIN 576  Domestic Environmental Policy  credit: 2 Hours.
Environmental regulation has become ubiquitous; Modern business leaders need to be aware of how it affects their businesses and how to operate within its constraints. The focus of this course is the design and critique of domestic environmental policies such as liability law, taxation, command-and-control regulations, and permit markets. We compare their effectiveness and distributional impacts, including effects on regulated firms, and discuss the differential effects these policies can have on technological process. Prerequisite: MAS BPP Concentration.

FIN 577  International Environmental Policy  credit: 2 Hours.
As the business landscape becomes more and more global, international environmental policy is increasingly more relevant for the success of modern firms. In this course, we demonstrate how one country’s policies can affect other countries and firms in those countries, the typical difficulties that arise in negotiating international environmental agreements and how these can be ameliorated, and the interaction between trade and the environment. Prerequisite: MAS BPP Concentration.

FIN 578  Govt Market Economy  credit: 2 Hours.
Given the presumed efficiency of competitive markets, when might it be appropriate for government to intervene? This course reviews possible “market failures” like externalities, public goods, taxes, monopoly power, adverse selection, and moral hazard. We show how each can reduce efficiency of private markets. We then discuss whether, when and how government can improve economic welfare using well-designed tax policy, social insurance, environmental regulation, or health policy. Prerequisite: MAS BPP Concentration.

FIN 579  Applied Portfolio Management  credit: 4 Hours.
Applies academic topics on financial markets, security analysis/valuation and portfolio management to hands-on investment management. Students will form and review objectives, constraints, and investment policy as it relates to the client’s money under management. They will purchase securities, monitor performance of the portfolio, and make recommendations for any adjustments to the holdings. They will be fully educated and responsible for the fiduciary and ethical standards of professional money management as guided by the CFA Institute. May be repeated to a maximum of 8 hours. Prerequisite: Credit or concurrent enrollment in FIN 511.

FIN 580  Special Topics in Finance  credit: 0 to 4 Hours.
Approved for letter and S/U grading. May be repeated to a maximum of 18 hours in a semester; may be repeated to a maximum of 32 hours in subsequent semesters. Prerequisite: Varies by section.

FIN 590  Individual Study and Research  credit: 0 to 4 Hours.

FIN 591  Theory of Finance  credit: 4 Hours.
Examines theoretical frameworks for financial decision making under certainty and uncertainty, as well as perfect and imperfect capital markets; discusses state preference, mean-variance, and continuous time models; emphasizes the structure of individual utility functions. Prerequisite: ECON 502; STAT 400; and admission to doctoral program or consent of instructor.

FIN 592  Empirical Analysis in Finance  credit: 2 or 4 Hours.
Designed to train the student in the conduct of empirical work in Finance. Covers the major tools and databases needed to replicate the results of published academic papers and to conduct original research. Prerequisite: Enrollment in the doctoral program in Finance or consent of instructor.

FIN 593  Seminar in Investments  credit: 4 Hours.
Investigates portfolio theory, CAPM, OPM, and arbitrage pricing theory theoretically and empirically; uses both mathematical statistics and modern econometric models to empirically analyze investment decisions and portfolio management. Prerequisite: FIN 591 and ECON 507.

FIN 594  Seminar in Corporate Finance  credit: 4 Hours.
Theories, paradigms, and models of nonfinancial corporations; investigates the theoretical foundations and empirical evidence regarding corporate resource allocation, capital structure decisions, and dividend policies; covers in detail contingent claim analysis, signaling theory, and agency theory. Prerequisite: FIN 591 and ECON 507.

FIN 599  Thesis Research  credit: 0 to 16 Hours.
Required for those writing master’s and doctoral theses in finance. Approved for S/U grading only. May be repeated to a maximum of 16 hours.