#### **FIN - FINANCE**

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

#### Courses

#### FIN 199 Undergraduate Open Seminar credit: 0 to 5 Hours. (https://courses.illinois.edu/schedule/terms/FIN/199/)

Approved for letter and S/U grading. Course may be repeated for credit.

## FIN 221 Corporate Finance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/221/)

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. (https://courses.illinois.edu/schedule/terms/FIN/230/)

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 241 Fundamentals of Real Estate credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/241/)

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. (https://courses.illinois.edu/schedule/terms/FIN/300/)

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. (https://courses.illinois.edu/schedule/terms/FIN/321/)

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 380 Entrepreneurship through Acquisition credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/380/)

Focuses on the process involved in Entrepreneurship through Acquisition, i.e., acquiring and growing an existing small business. The course will be combination of lectures and presentations by invited speakers, including research professionals, bankers, accountants, and attorneys specializing in small company deals, business brokers, PE and VC professionals, and entrepreneurs who have bought a small business or are in the process of buying a small business. Credit not given toward graduation if the student has received credit for FIN 490, CRN 69357, Section ETA. Prerequisite: Restricted to Undergrad students with Junior and Senior class standing.

#### FIN 390 Finance Academy credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/390/)

A program aimed at preparing students for Golder Academies open to all second-semester students at Gies. Its goals are to equip students with essential technical skills for career advancement and to enhance their job recruitment understanding. Skills developed will also support academic success in upper-level Finance courses. Course will not satisfy Finance major requirements. Prerequisite: Induction into the Finance Academy. Restricted to Freshman students in their second semester.

## FIN 391 Investment Banking Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/391/)

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. (https://courses.illinois.edu/schedule/terms/FIN/392/)

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 393 Risk Management Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/393/)

The Risk Management Academy is an enrichment program for outstanding undergraduates from across campus. The nature of risk management requires a knowledge base that includes majors from a number of colleges and departments including Finance, Actuarial Science, Atmospheric Sciences, Financial Planning, Engineering, Math and Statistics. RMA provides a select program that focuses on developing future business leaders in risk management via enhanced academic and career opportunities. Students are normally invited to participate by the faculty during their freshman or sophomore year, when they are enrolled in FIN 230 and other basic RM courses. If inducted/accepted, students participate throughout their sophomore, junior and senior years. Approved for Letter and S/U grading. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Acceptance into the Risk Management Academy. Restricted to students accepted in the Risk Management Academy.

## FIN 394 Women in Finance Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/394/)

Given the unique challenges women face in the business world, this course provides the tools for women to thrive in careers in finance. The course includes a mentoring program, soft and technical skills development, panel discussions with women leaders, and networking opportunities. Admission by application process in the prior semester. May be repeated in separate terms. Prerequisite: Instructor approval required. Students accepted into the Academy will be allowed to participate in their Freshman, Sophomore, Junior, and Senior years.

#### FIN 395 Real Estate Finance Academy credit: 1 Hour. (https://courses.illinois.edu/schedule/terms/FIN/395/)

The Real Estate Finance Academy prepares students for careers within the real estate industry. Topics include real estate financial modeling, investment case studies, underwriting real estate markets, and developing professional communication skills. Students who choose to repeat the course assume leadership roles over time. May be repeated for a maximum of 6 hours in separate terms. Prerequisite: Admission by application only.

## FIN 411 Investment & Portfolio Mngt credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/411/)

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. (https://courses.illinois.edu/schedule/terms/FIN/412/)

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. (https://courses.illinois.edu/schedule/terms/FIN/413/)

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. (https://courses.illinois.edu/schedule/terms/FIN/414/) Same as ECON 414. See ECON 414.

## FIN 415 Fixed Income Portfolios credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/415/)

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 416 Applied Derivative Strategies credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/416/)

Building upon the basic options knowledge gained in FIN 412, this course covers volatility trading looking not only at the CBOE VIX product and OTC variance swaps, but also the application of volatility trading across all asset classes with listed products. The most topical options and derivatives structures such as risk parity, risk premia capture, alternative risk premia and volatility targeting are explored at the conclusion of the course. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 and FIN 412.

## FIN 418 Financial Modeling credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/418/)

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 date, 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.

## FIN 419 Real Client Managed Portfolios credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/419/)

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. (https://courses.illinois.edu/schedule/terms/FIN/422/)

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 Entrepreneurial Finance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/423/)

The study of the financial side of entrepreneurial firms, including alternative methods of organization, sources of financing, use of financial statements as a management tool, financial planning, valuation methods, and exit strategies, all from the perspective of an owner, CEO or CFO. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: FIN 300 or consent of instructor.

## FIN 424 Mergers and Acquisition credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/424/)

Focuses 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. (https://courses.illinois.edu/schedule/terms/FIN/425/)

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 428 Cases in Financial Derivatives credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/428/)

This advanced elective course on financial derivatives explores the economic, legal, and regulatory concepts underlying these markets. It uses case studies to examine market weaknesses, design flaws, and regulatory breakdowns, many of which have resulted in major disasters. 3 undergraduate hours. No graduate credit. Credit is not given for FIN 428 and FIN 490 (66772) Section ADF. Prerequisite: FIN 300 or consent of instructor. Undergraduate only.

## FIN 431 Property-Liability Insurance credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/431/)

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 Market Risks for Financial Institutions credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/432/)

Covers management of tradable financial market risks in the context of financial institutions which incur these risks through their operations, product offerings, assets, and liabilities. We examine the models and methods in practice to measure and manage interest rate, equity, credit, and other market risks with a focus on using financial derivatives such as futures, swaps, and options. Course is applications-oriented with heavy emphasis on numerical modeling. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300.

## FIN 433 Corporate Risk Management credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/433/)

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. (https://courses.illinois.edu/schedule/terms/FIN/434/)

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. (https://courses.illinois.edu/schedule/terms/FIN/435/)

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 barrowing, 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 443 Legal Issues in Real Estate credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/443/)

Overview of legal concepts, issues, and principles involving real estate. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: Junior standing or consent of instructor.

## FIN 444 Urban Real Estate Valuation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/444/)

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. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of the instructor, FIN 241 is recommended but not required.

## FIN 445 Real Estate Investment credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/445/)

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 constraint, 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. (https://courses.illinois.edu/schedule/terms/FIN/446/)

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. (https://courses.illinois.edu/schedule/terms/FIN/447/)

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 provide graduating seniors some insights into different career paths to help improve the career choices that they make. 3 undergraduate hours. 4 graduate hours. Prerequisite: FIN 221 or FIN 241.

#### FIN 448 Advanced Real Estate Investments credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/448/)

Case-based analysis of multiple real estate investments with different partnership structures. Each analysis: generates a pro forma, investment memorandum and presentation; considers different capital stack structures; performs model stress testing and sensitivity analysis; identifies elements influencing optimization of negotiated agreements; examines REITs to correlate publicly traded real estate company prices with relevant benchmarks. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 445, or consent of instructor.

## FIN 453 Introduction to Machine Learning in Finance credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/453/)

Machine Learning includes the design and the study of algorithms that can learn from experience, improve their performance, and make predictions. In this course, students will learn the foundations of Machine Learning and explore standard tools and algorithms. Topics include supervised learning (neural networks, regression trees, gradient boosting), unsupervised learning (clustering, principal component analysis), and introduction to reinforcement learning (Deep Q-Networks). Applications include option pricing, and credit card fraud detection. Students will gain practical experience implementing these models in Python with frequently used packages such as PyTorch, ScikitLearn and XGBoost. 3 undergraduate hours. No graduate credit. Prerequisite: MATH 220 or MATH 221 or MATH 234; MATH 227 or MATH 257; STAT 207; CS 307; FIN 321; FIN 411. Restricted to Finance or Finance + DS majors.

## FIN 461 Banking and Financial Regulation credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/461/)

Survey of the structure, functions, regulation, and risk management activities of banks and nonbank financial institutions; central banking and monetary policy effects on financial institutions. 3 undergraduate hours. No graduate credit. Prerequisite: FIN 300 or consent of instructor.

## FIN 463 Investment Banking credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/463/)

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 Applied Financial Analysis credit: 3 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/464/)

Provides key building blocks necessary for many careers in finance. Designed to provide a practical approach to analyzing and interpreting complex financial statements to make decisions from a range of user perspectives, including investment banks, equity investors and commercial banks. Advanced financial analysis and forecasting will be applied through assignments and casework. There will be an emphasis on business writing skills commonly applied by finance professionals. 3 undergraduate hours. 4 graduate hours. Credit is not given for FIN 464 and FIN 490 CRNs 57268 and 57353. Prerequisite: ACCY 201. Priority given to finance majors.

## FIN 490 Special Topics in Finance credit: 1 to 3 Hours. (https://courses.illinois.edu/schedule/terms/FIN/490/)

Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. 1 to 3 undergraduate hours. No graduate credit. May be repeated in the same term, if topics vary, or subsequent terms up to a maximum of 3 undergraduate hours. Prerequisite: FIN 300 or consent of instructor.

## FIN 494 Senior Research credit: 2 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/494/)

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. (https://courses.illinois.edu/schedule/terms/FIN/495/)

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. (https://courses.illinois.edu/schedule/terms/FIN/500/)

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: Graduate standing or consent of department.

## FIN 501 Financial Economics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/501/)

A firm's long-run value ultimately depends on its business fundamentals. This course covers micro- and macro-economic drivers of such fundamentals, such as consumer demand, market competitiveness, government regulation, interest rates, business cycles, and monetary policy. Also includes topics in risk and intertemporal decision-making.

#### FIN 502 Quantitative Finance credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/502/)

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.

## FIN 503 Quantitative Finance II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/503/)

This course covers topics in time series analysis with an emphasis on applications. It is intended to prepare MSF students for more advanced courses in finance. This course provides some basic knowledge of financial time series data. It also introduces models and methods widely used by academics and practitioners. The purpose of this course is to understand proper use and limitations of econometric methods in applied time series analysis. Prerequisite: FIN 502 or consent of department.

## FIN 504 Accounting for Financial Analysis credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/504/)

This course will develop an understanding of the most fundamental accounting concepts and provide key building blocks necessary for intermediate and advanced financial statement analysis. It is designed to provide a basic but practical application of financial analyses commonly performed by industry professionals.

## FIN 511 Investments credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/511/)

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.

## FIN 512 Financial Derivatives credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/512/)

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.

## FIN 513 Applications of Financial Engineering credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/513/)

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 Valuation of Complex Derivative Securities credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/514/)

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. (https://courses.illinois.edu/schedule/terms/FIN/515/)

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: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/516/)

Coverage of the fundamental models of the term structure of interest rates, including their implementation, calibration, and use in valuing interest rate derivatives. Focus will be on the Black model and short rate models such as Black-Derman-Toy and Hull-White. Approved for Letter and S/U grading.

## FIN 517 Advanced Term Structure Models credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/517/)

This class is a continuation of FIN 516 Term Structure Models. Coverage of advanced term structure models with a focus on the LIBOR Market Model (LMM). Students will learn the theory behind the model, how to calibrate the model to data and how to develop numerical algorithms in order to implement the model to price a variety of real world interest rate products. Prerequisite: FIN 516.

## FIN 518 Financial Modeling credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/518/)

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 Behavioral Finance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/519/)

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.

#### FIN 520 Financial Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/520/)

Introduction to financial management and decision making. Course topics: financial statement analysis, time value of money, project analysis and investment criteria, discounted cash-flow analysis for investment decisions, capital budgeting and planning (short-term and long-term), working capital management, and risk management.

### FIN 521 Advanced Corporate Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/521/)

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.

#### FIN 522 Cases in Financial Strategy credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/522/)

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; and capital structure, dividend policy; and firm valuation. Prerequisite: FIN 521.

## FIN 526 Investment Banking credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/526/)

Provides 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. Prerequisite: Previous introductory accounting and finance coursework recommended. Graduate students only.

#### FIN 527 Mergers & Acquisitions Topics credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/527/)

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. Prerequisite: FIN 521.

## FIN 528 Cases in Financial Derivatives credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/528/)

This advanced elective course on financial derivatives explores the economic, legal, and regulatory concepts underlying these markets. It uses case studies to examine market weaknesses, design flaws, and regulatory breakdowns, many of which have resulted in major disasters.

## FIN 529 Applied Financial Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/529/)

Provides key building blocks necessary for many careers in finance. Designed to provide a practical approach to analyzing and interpreting complex financial statements to make decisions from a range of user perspectives, including investment banks, equity investors and commercial banks. Advanced financial analysis and forecasting will be applied through assignments and casework. There will be an emphasis on business writing skills commonly applied by finance professionals. Prerequisite: FIN 504 or ACCY 501 or equivalent. A baseline understanding of financial accounting is expected of all students.

#### FIN 530 Foundations in Risk Management credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/530/)

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).

#### FIN 532 Managing Market Risks for Financial Institutions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/532/)

Covers management of tradable financial market risks in the context of financial institutions which incur these risks through their operations, product offerings, assets, and liabilities. We examine the models and methods in practice to measure and manage interest rate, equity, credit, and other market risks with a focus on using financial derivatives such as futures, swaps, and options. Course is applications-oriented with heavy emphasis on numerical modeling. Credit is not given if the student has received graduate credit in FIN 432.

## FIN 535 Wealth Management credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/535/)

This course 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. The course also allows students to build a wealth management plan based on a case scenario.

## FIN 536 Banking and Financial Regulation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/536/)

Survey of the structure, functions, regulation, and risk management activities of banks and nonbank financial institutions; central banking and monetary policy effects on financial institutions.

## FIN 537 Financial Risk Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/537/)

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. Prerequisite: FIN 500 or FIN 512 (concurrent enrollment allowed); IE 522, or consent of instructor.

#### FIN 538 Enterprise Risk Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/538/)

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 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 541 Real Estate Fundamentals credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/541/)

Discusses the theory and practice of real estate and urban land economics; emphasizes real estate market analysis, finance, appraisal, and investment.

## FIN 543 Legal Issues in Real Estate credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/543/)

This course examines the fundamentals of real estate from a legal perspective. Students develop skills in using legal concepts in a real estate transactional setting that incorporates traditional course materials, case studies, real life transactions, and guest lectures designed to provide a practical "hands-on" approach to real estate law. We explore a broad range of current sophisticated real estate transactions relating to residential and commercial purchases, sales, leasehold interests, common interest communities, ownership, financing, brokerage, land use and development. We discuss the legal implications that contractual private and legislative public restrictions have on individuals' real property rights and discuss public policy arguments related to private owners' legal rights.

## FIN 544 Urban Real Estate Valuation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/544/)

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. Prerequisite: FIN 541 is recommended but not required.

## FIN 545 Real Estate Investment credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/545/)

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. Prerequisite: FIN 541 is recommended but not required.

### FIN 546 Real Estate Financial Markets credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/546/)

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. Prerequisite: FIN 541 recommended but not required.

## FIN 547 Real Estate Development credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/547/)

Discusses key steps in the real estate development process, from market feasibility analysis to financing, legal issues, construction and asset management. Current issues in real estate development will also be presented by guest lecturers who are senior industry executives. Prerequisite: FIN 541 recommended but not required.

## FIN 550 Big Data Analytics in Finance for Predictive and Causal Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/550/)

Recent trends in "big data" present both enormous challenges and opportunities for businesses. This course introduces concepts and techniques of data analytics and shows how they can be used for making predictions, and to distinguish between correlation and causation, in the context of financial and economic analysis. Covered tools include data visualization, machine learning, regression analysis, randomized trials, A/B testing, and quasi-experiments.

#### FIN 551 International Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/551/)

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.

## FIN 552 Applied Financial Econometrics credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/552/)

The aim of this course is to equip students with a working knowledge of important econometric techniques necessary to understand and interpret financial market data. The course covers time-series and cross-sectional properties of asset returns, predictability of equity returns, empirical tests of asset pricing models, modelling time-varying volatility. The interplay between asset pricing theories, statistical assumptions and relevant econometric techniques is explored in the context of published empirical work, including classical papers as well as a more recent research. Prerequisite: FIN 511.

## FIN 553 Machine Learning in Finance credit: 2 or 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/553/)

Machine Learning includes the design and the study of algorithms that can learn from experience, improve their performance and make predictions. In this course students will learn the foundations of Machine Learning and explore state of the art algorithms and tools. Topics include supervised learning (neural networks, support vector machines), unsupervised learning (clustering, dimensionality reduction) and reinforcement learning (dynamic programming, Q-learning, SARSA, policy gradient methods). Applications include option pricing, portfolio selection and credit card fraud detection. Students will gain practical experience implementing these models in Python with frequently used packages such as TensorFlow.

## FIN 554 Algorithmic Trading Systems Design and Testing credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/554/)

Provides a detailed research process and tools for replicating, assessing, conceptualizing, and developing systematic trading strategies. Students will apply their knowledge in hands-on projects to replicate and evaluate existing research and to create and evaluate a new strategy model. Students will use the R Language for Statistical Computing and Graphics to replicate academic research and evaluate the claims made in papers. Students will also construct a non-trivial strategy from scratch, evaluate the power of each of its components, and examine the likelihood of overfitting. Projects are designed to mimic as closely as possible the day-to-day research activities of working strategy quants, so that students will have practical experience building, testing, and evaluating quantitative models.

#### FIN 555 Financial Innovation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/555/)

Recent years have seen the rapid development of the fintech sector, bringing together technology and data, startups and established firms in ways that are likely to shape and disrupt financial markets going forward. This course will involve a mix of lectures, guest speakers, and class discussion of breaking developments and new ventures. Some of the fintech sectors we will discuss include consumer finance, payments, investing and trading, cryptocurrencies and blockchain, and privacy and regulatory concerns. Because of the innovative and rapidly evolving nature of the fintech sector, this class will depend heavily on student engagement and class discussion. Students should be prepared to participate actively, and not just sit and listen to lectures. Each student will participate in two group presentations on the fintech sector, at the middle and end of the semester. A group project is due at the end of the semester, detailing a fintech startup idea, an analysis of an existing fintech business, or an analysis of a fintech sector. Credit is not given for FIN 555 and FIN 580: Section FT2 (72037).

## FIN 556 Algorithmic Market Microstructure credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/556/)

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.

## FIN 557 Financial Data Management and Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/557/)

Proper data handling and management is essential to the success of data analysis. The primary goal of this course is to learn principles and practices of data management with an emphasis on working with financial databases. Students will gain practical skills in data storage, data preparation, and data extractions that eventually lead to data analysis. Data management procedures including SQL queries, and data analysis techniques using large-scale statistical software are presented. Prerequisite: Restricted to MS: Finance, MS:Business Analytics.

## FIN 558 Data Science and Python for Finance credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/558/)

Focuses on introducing Python for financial analysis. It provides a detailed understanding of Python basics. Students will apply Python in solving problems in corporate finance and performing investment analysis. Topics include capital budgeting decisions, equity valuation, risk and return, portfolio optimization, and technical trading strategies.

## FIN 559 Advanced Data Science and Python for Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/559/)

Provides an advanced understanding of Python and data analytics tools to solve problems in finance. Students will analyze data and solve real-world problems such as investigating market responses to earnings announcements, comparing value and growth investing, forecasting stock prices, predicting bankruptcy, and estimating house prices.

#### FIN 570 Corporate Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/570/)

You will learn how to use key finance principles to understand and measure business success as well as identify and promote true value creation. You will also learn financial management tools that allow us to determine the optimal financing and risk management strategies for corporations. In the first part of the course, you will learn how to use accounting information to form key financial ratios to measure a company's financial health and to manage a company's short-term and long-term liquidity needs. You will also learn how to use valuation techniques to make sound business investment and acquisition decisions. Finally, you will learn how to incorporate risk and uncertainty into investment decisions and evaluate the performance of existing investments. In the second part of the course, you will learn how companies choose how much debt to have and which type of debt to issue. You will also learn how payout decisions (dividends and share repurchases) affect firm value and how to determine a company's optimal payout policy. Finally, you will learn how to use risk management tools, such as derivatives, and liquidity to mitigate specific risks, such as currency risk. You will apply these tools to develop a financial management framework for M&A decisions, and R&D investments. Credit is not given for FIN 570 if the student has received credit for FIN 584 Corporate Finance I and II (41321, 41322). Prerequisite: Enrollment is often restricted to students in specialized programs.

## FIN 571 Money and Banking credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/571/)

This online course will provide you with a framework that can be used to understand the connections between money, banking, and financial markets, as well as the implementation and impacts of modern monetary policy. Upon completion of this course, you will be able to apply this framework to assess how new developments in finance and public policy may influence the macroeconomic and business environment. Credit is not given towards graduation for FIN 571 and ECON 529. Prerequisite: Enrollment is often restricted to students in specialized programs.

## FIN 572 The Finance of Mergers and Acquisitions credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/572/)

Focuses on the theory and practice of mergers and acquisitions (M&A), with a focus on the Finance. The Finance of M&A uses tools from different areas of Finance to help managers and investment bankers design successful M&A deals. In particular, we will learn to value and price M&A deals and how to choose the optimal financing mix for an M&A deal. The course focuses on all the major types of M&A deals including strategic M&A, private equity leveraged buyouts (LBOs), and restructuring deals such as spinoffs and asset transfers. The course will benefit any student who desires to increase their ability to understand and execute M&A deals, including (but not limited to), entrepreneurs, consultants, bankers, investors, analysts, corporate managers, marketers, strategists, and deal-makers of all types. The course will also deepen students' understanding of financial modeling and capital structure, both in theory and practice. Prerequisite: It is recommended that students complete ACCY 500, FIN 570, and BADM 572 (or equivalents) before enrolling in this course. Requires that students have a grasp of core accounting principles and have a basic knowledge of concepts in finance (time value of money, net present value, cost of capital and a basic notion of capital structure). Students should also be comfortable with work that is quantitatively focused, and have a basic notion of Statistics (means, medians, standard deviation, and regression tools).

#### FIN 573 Applications of Investment Banking Concepts credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/573/)

Will build off the core topics explored in FIN 572, The Finance of Mergers and Acquisitions and ACCY 532, Accounting for Mergers and Acquisitions and Other Complex Transactions. It is designed to provide a practical application of financial statement analysis, modeling, and valuation. The course covers the mechanics of financial statement analysis, ratio analysis, and financial model building. The course will also focus on applying the financial statements and forecasts within the context of company valuation, utilizing common industry techniques. Prerequisite: It is recommended that students have a grasp of core accounting principles and have a basic knowledge of concepts in finance (time value of money, etc.). It is also recommended that students complete ACCY 532 and FIN 572 (or equivalents) before enrolling in this course.

## FIN 574 Microeconomics for Business credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/574/)

Microeconomics for professional business students. Shows relevance of value and distribution theories for business managers. Includes demand and supply theory, consumer choice, production and cost theory, industrial structure, and wage and capital theory. Intended for students in the Master of Business Administration program. Credit is not given toward graduation for FIN 574 and ECON 302, ECON 500 or ECON 528. Prerequisite: Enrollment is often restricted to students in specialized programs.

#### FIN 575 Investments & Performance Evaluation credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/575/)

We analyze the trade-off between risk and expected return along with portfolio choice, performance evaluation, and security pricing. We use the Capital Asset Pricing Model (CAPM) and multi-factor models to evaluate the performance of various securities and portfolios. We establish benchmark returns for securities and apply firm valuation techniques. We discuss market efficiency and its implications. We apply these techniques to the performance of mutual funds, hedge funds, and strategies designed to earn risk-adjusted returns. Credit is not given toward graduation for. FIN 575 and FIN 511. Prerequisite: Restricted to Gies College of Business iDegree students.

## FIN 580 Special Topics in Finance credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/580/)

Lectures and discussions relating to new areas of interest. See class schedule for topics and prerequisites. 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. Credit is not given for FIN 528 and FIN 580 (66393), Section ADF. Course Information: Prerequisite: Varies by section.

## FIN 581 Professional Development credit: 1 or 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/581/)

Effective communication skills are one of the most sought-after traits of business leaders across industries and throughout the world. Understanding the world around you, as well as communicating clearly and persuasively is critical to your success as a student, as an employee and as a leader in the business world. These skills will help establish your own credibility and lead you to become an effective leader among your peers and colleagues. This course will introduce successful strategies for structuring both written and verbal communication in the business world, with an eye toward the specific outcomes listed below. Prerequisite: Restricted to MSF and MSFE students.

## FIN 582 Project Management credit: 1 to 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/582/)

This course is all about learning by doing. It is designed to assist you in your real-world experience as you work in a team with a real organization to help solve a problem the organization is facing. In class, we will help you gain the skills you will need to successfully complete the project. If you work hard in this class, you will have a compelling story to tell as you interview for internships and jobs and you will gain skills that will help you succeed in your career. Approved for S/U grading only. Prerequisite: Concurrent enrollment in FIN 583 is required. Restricted to MSF students.

## FIN 583 Practicum credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/583/)

A semester-long, typically corporate-sponsored, team project for MSFE and MSF students that is usually completed by the end of the third semester of study. The goals of the Practicum are: a) to use learned or new tools on real world projects of interest to the corporate sponsor; b) to replicate as closely as possible the environment of the working world where students will soon find themselves employed; c) to work cohesively with other members of a team so as to efficiently produce the desired project results; and d) to be able to communicate effectively with technical and non-technical audiences, which may include the sponsor and/or co-workers. Prerequisite: Restricted to MSF and MSFE students.

## FIN 585 MSF Academy I credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/585/)

MSF Academy I helps students understand finance industry functions, skills, and expertise needed for a variety of careers. The course fosters comprehension of industry practices and prepares students for professional activities. Additional objectives include staying informed on industry trends, enhancing career placement skills, and building a professional network for future growth and success in the finance field. Prerequisite: Restricted to students in the MSF program.

## FIN 586 MSF Academy II credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/FIN/586/)

MSF Academy II builds upon the skills learned in MSF Academy I by focusing within a specific area of the finance industry. Prerequisite: FIN 585. Restricted to students in the MSF program.

## FIN 589 Applied Portfolio Management credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/589/)

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 590 Individual Study and Research credit: 0 to 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/590/)

Directed reading and research. Approved for Letter and S/U grading. Course may be repeated up to 16 hours.

#### FIN 591 Theory of Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/591/)

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. (https://courses.illinois.edu/schedule/terms/FIN/592/)

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. (https://courses.illinois.edu/schedule/terms/FIN/593/)

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. (https://courses.illinois.edu/schedule/terms/FIN/594/)

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 595 Empirical Corporate Finance credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/595/)

This seminar will study recent research in corporate finance that uses modern empirical methods to focus on causal inference. Students will be required to write a research proposal. The objective is to sharpen students' skills as consumers and producers of empirical corporate finance. This seminar is also beneficial for researchers in related fields such as credit markets and banking, asset pricing, financial accounting and applied microeconomics. Credit is not given toward graduation for FIN 595 and Spring 2024 FIN 580, Section 595.

#### FIN 597 Microeconomic Analysis credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/FIN/597/)

Provides a one-semester treatment of doctoral-level microeconomic theory and analysis for graduate students in business and related disciplines, covering topics such as consumption, production, equilibrium, monopoly, market failure, and game theory. Applications are drawn from business disciplines. Prepares students for original research and further doctoral studies. Also appropriate for advanced undergraduate or master's students considering doctoral studies. 4 graduate hours. No professional credit. Credit is not given toward graduation for FIN 597 and FIN 580, Section GMT, or ECON 530, Section P2. Prerequisite: Assumes some knowledge of microeconomics, multivariate calculus, and probability theory.

## FIN 599 Thesis Research credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/FIN/599/)

Required for those writing master's and doctoral theses in finance. Approved for S/U grading only. May be repeated in separate terms.