FIN 523: High-Frequency Finance
This course will give students an overview of theories and models useful in understanding and processing automated trading. The fundamental theories and models of market microstructure such as the Glosten-Milgrom model, Roll model and Kyle models are covered. Then the implementation of automated trading strategies such as adverse selection models and detection of informed trading are introduced. The nature of high frequency data in various markets is discussed, and mathematical and statistical techniques commonly used in modeling such data (such as ARIMA models, logit regression, Kalman filter and cointegration) are covered.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 524: Asset Pricing
This course will give students an overview of asset pricing theory, estimating asset pricing models, pricing options and other derivatives. Topics covered will include Consumption-Based Pricing Model and Discount Factors; Mean-Variance Frontier and Beta Presentations; Factor Pricing Models(Capital Asset pricing Models and Arbitrage Pricing Theory); Speciation and testing of linear factor models; Hansen-Jagannathan bounds; Option pricing and Black-Scholes Formula; Term Structure of Interests Rate; Numerical methods for derivative pricing.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 525: Portfolio Management
This course will give students an overview of the basics of investing, portfolio management, and risk management, from the perspective of efficient markets theory. Topics covered will include the institutions of the modern financial system and the types of assets available for investment; models of risk, the risk-return tradeoff and utility; optimal portfolio choice; the Capital Asset Pricing Model; multifactor models of return; portfolio evaluation metrics; basic dynamic portfolio management strategies; the efficient markets hypothesis, and possible departures from market efficiency.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 526: Experimental Finance
The course will cover all important aspects of experimental finance (and related aspects of traditional and behavioral finance) and will be divided into three parts: game-theoretical, individual and market experiments. Lab as well as field experimental will be discussed. Topics include, but are not limited to: behavioral finance, experimental economics, decision theory, decision analysis, experimental design, bank runs, equity premium puzzle, myopic loss aversion, experience-description gap in risky choice and financial decisions, disposition effect, forecasts, risk-taking behavior of investors, experimental asset markets, bubbles in financial markets and asset pricing. Additionally, students are required to participate in experiments themselves.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 527: Financial Econometrics
Financial econometrics is a quest for models that describe financial time series such as prices, returns, interest rates, and exchange rates. In Financial Econometrics, students will be introduced to this growing discipline and the concepts and theories associated with it, including background material on probability theory and statistics. This course will utilize real-world data and illustrative examples to explain the various topics.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 528: Risk Models in the Practice of Finance
In the post-crisis world, risk measurement and management have become of key importance both to industry players and regulators. The practice of risk management however relies on risk models implemented in software solutions either provided by a vendor or built in house. This course focuses on risk modeling from an applied perspective. It discusses traditional factor model based risk models implemented for example in APT#, Barra#, and Axioma# solutions, the general Delta-Normal model behind the RiskMetrics approach and more sophisticated alternatives, extreme risk modeling provided by mainstream and niche vendors, and the credit risk models behind Moody’s and MSCI# solutions. The course discusses the foundations of these risk models and also includes additional topics such as operational risk, liquidity risk, back-testing, stress-testing, model risk and also relevant topics from the regulatory framework.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 536: Financial Management
How managers should interface with accounting and finance departments and how firms meet their financial objectives. Financial tools and techniques, which can be used to help firms maximize value by improving decisions relating to capital budgeting, capital structure, and working capital management are explained. Related topics include multinational financial management, risk management, and mergers and acquisitions.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 539: Investment Analysis
Modern investment and traditional approaches to investment valuation, selection and management. Modern investment theory, including asset pricing models and efficient market hypotheses are explained. Traditional approaches to stock and bond selection, including fundamental analysis and technical analysis, will be explained in detail. Investment management strategies for both individual and institutional investors will be developed and discussed.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 540: Probability and Statistics for Finance
A survey of probability theory and statistical techniques with applications to finance situations. Topics covered include regression; binomial, Poisson, normal, exponential, and chi square random variables; tests of hypotheses; confidence intervals; tests; and analysis of risk, variance, regression, and contingency tables. Offered in Fall.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 541: Bank Management
The goal of the course is to introduce students to the banking industry, and develop skills necessary to effectively manage a financial institution. We will start with an overview of the banking industry and its regulatory environment. Then we will learn how to analyze bank performance, how to measure and manage various risks associated with financial intermediation, and how to maximize bank market value.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 545: Capital Markets and Financial Institutions
Financial institutions and capital markets form the basis of the financial system in our global economy. Capital markets are the conduits in which capital flows through financial institutions to a network of organized and over the counter markets. Students will learn how many of these markets work in tandem to propel our economy forward. Topics include money markets, foreign exchange markets, derivative markets, the banking industry and the business of banking. The role of money in the capital markets and a variety of financial products offered by financial institutions will be explained.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 547: Fundamentals of Fixed Income Analysis
A concrete understanding of the fundamentals of fixed income security analysis. Study of the basics of bond analysis, such as the relationship between the price and yield of a bond, the sensitivity of a bond's price to changes in yield, and measuring the total return on a bond. We will analyze the determinants of interest rates and how different market participants interact. Trading strategies, evaluate their risk, and perform ex-post analyses will be discussed.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 549: Risk Management
This course introduces students to risk management primarily from the perspective on non-financial corporations. Focus will be placed on why firms should or should not manage risk, while demonstrating how risk management can be used to reduce the probability that a firm will encounter financial distress or earnings volatility, and whether such activities can enhance shareholder value. The course offers an integrated approach to risk management by combining concepts, tools, and techniques which derive from the financial risk management and insurance disciplines. The course texts focus on pure risk, or the use of insurance products to reduce risk and financial risk management, including commodity price, exchange rate, interest rate, and credit risk management. Financial derivative products will be used extensively; however, the focus will be more on the appreciation of derivative products to hedge risk, rather than the valuation of derivatives.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 551: Cases in Finance
Application of finance concepts to cases involving financial decisions in a corporate or institutional setting. Students will be asked to perform the work of a manager or analyst in a professional capacity, direct their attention to specific questions raised and report back with analysis and recommendations from the perspectives of the CFO, the Lending Officer, and other managerial positions. Prerequisite: MBA 502 and MBA 504
3 credits, Letter graded (A, A-, B+, etc.)

FIN 552: Mergers and Acquisitions
The focus of this course is on buying a controlling stake in firms. The main topics to be covered are: Growth through acquisitions, Critical Steps in the M&A Process, financial valuation of mergers and friendly acquisitions, hostile takeovers and buyouts. The course should be of interest to students interested in pursuing careers as private equity investors, advisors in investment banking and corporate managers. Prerequisite: MBA 502, MBA 504
3 credits, Letter graded (A, A-, B+, etc.)

FIN 559: Computational Finance
3 credits, Letter graded (A, A-, B+, etc.)

FIN 578: Behavioral Finance
Behavioral Finance examines how individuals' attitudes and behavior affect their financial decisions. This course reviews recent research on possible mispricing in financial markets due to the nature of psychological biases. Moreover the course deals with behavioral finance models explaining investor-behavior or market anomalies when rational models provide no sufficient explanations. Topics will include among others overconfidence, prospect-theory, heuristic-driven biases and frame dependence.
3 credits, Letter graded (A, A-, B+, etc.)

FIN 579: Advanced Investments
This course will focus on advanced topic in investment theory and valuation. The analyses of fixed-income securities, equity securities, and derivative securities will be studied. The theories, principles, and techniques of portfolio management will also be presented. The topics include the portfolio investment process, asset allocation, portfolio construction, and portfolio performance evaluation.
3 credits, Letter graded (A, A-, B+, etc.)