Accelerated Master of Science in Finance

Course Descriptions

Foundation Courses

FIN B62 510. Introduction to Finance

The main topics to be covered in this course are (1) principles of investments, (2) financial analysis of corporate projects, (3) cost of capital, and (4) capital structure and financing policies. The objective of the company is assumed to be shareholder value maximization. Shareholder value is created by earning more than the cost of capital. The cost of capital is an opportunity cost – what investors could expect to earn on comparable investments in the financial markets. To understand the cost of capital, we need to understand the viewpoint of investors. Furthermore, to understand whether a project earns more than the cost of capital, we need to know how to estimate and discount project cash flows. So, the first three topics are closely connected. The main question in the fourth topic is whether we can create shareholder value through the financial structure of the firm. For example, we will ask whether we can lower the cost of capital by financing with debt instead of equity, or vice versa. 1.5 Credits.

ACCT B60 560. Introduction to Accounting

In this course, we will study the three fundamental financial accounting issues, including (1) recognition, (2) measurement/valuation, and (3) classification/disclosure and consider how business transactions are reflected on the financial statements using generally accepted accounting principles (GAAP). We will cover the four primary financial statements (balance sheet, income statement, statement of stockholders' equity, and statement of cash flows), the supporting footnotes to these statements, and several reports (annual reports, proxy statements, and press releases). The course incorporates both a preparer's perspective (i.e., GAAP requirements for recording and presenting financial information) and a user's perspective (i.e., how an investor or analyst can interpret and use financial statement information). 1.5 Credits.
Summer I

FIN B62 532 Investment Theory

A course in the theory of risk and return in capital markets. Topics covered correspond to those which are covered in the CFA level 1 exam. We will cover the CAPM and APT models of asset pricing and will discuss various measures of mutual fund performance evaluation which arise from these models. We will discuss interest rate determination and also introduce the concepts of price and reinvestment risk in fixed income securities. 1.5 Credits.

FIN B62 534 Advanced Corporate Finance I – Valuation

This course considers a broad range of issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus will be on assessing the profitability of different business alternatives in a forward-looking sense. It will explicitly consider the impact of financing decisions on the valuation of business alternatives. Other topics covered include an examination of EVA as both a valuation and performance measurement tool, and a brief introduction to Real Options as an alternative to discounted cash flow analysis. The course is designed to be "hands-on", and will heavily focus on direct applications of the theory and the individual development of spreadsheet modeling skills. Students who successfully complete the course should possess a set of cutting-edge valuation skills. Students may not take both this class and FIN 523 for credit. 1.5 Credits.

FIN B62 524 Options and Futures

Focuses on futures with an introduction to options. Discusses forward and futures pricing, and the use of various futures contracts to hedge commodity price risk, interest risk, currency risk, stock portfolio risk, and other risk exposures. 1.5 Credits.

FIN B62 524B Derivative Securities

Provides an in-depth analysis of valuation and trading strategies for options and other derivative securities which have applications across areas of finance such as hedging, swaps, convertible claims, mortgage payments, index arbitrage, insurance, capital budgeting and corporate decision making, and are responsible for many new innovations and developments of the financial markets. Students may not receive credit for both this course and FIN 5460. Prerequisites: FIN 524. 1.5 Credits.

Summer II

FIN B62 532B Data Analysis for Investments

A course designed to teach students to use real data and real data sources to perform finance analysis. Students will learn how to understand various interest rates and calculate common risk measures for individual securities and portfolios. Students will also learn to use data sources such as the Bridge terminal, Bloomberg terminal, and DataStream and will use these tools to complete assignments. Students will learn to construct efficient frontiers, betas and adjusted betas, yield curves, and conditional volatility estimates. All students should leave the class being able to understand the sometimes confusing numbers which appear in the financial press, mutual fund prospective, and other sources. Prerequisite: FIN 532. 1.5 Credits.
FIN B62 534B Advanced Corporate Finance II – Financing

This course considers a broad range of issues faced by corporate financial managers with respect to the financing of investment opportunities. In this course, we turn to the right-hand side of the balance sheet as a direct follow up to the skills acquired in the Advanced Corporate Finance I - Valuation, a course that focused on the left-hand side of the balance sheet. The course is designed to be “hands-on”, and we will heavily focus on direct applications of the theory of financing to business practice. To that end, we will cover topics related to the valuation of bond and convertible securities, estimating the costs of financial distress, the reorganization of firms in financial distress, deriving an optimal capital structure, and the effects of management stock option grants on valuation. Students may not take both this course and FIN 523 for credit. Prerequisite: FIN 534. 1.5 Credits.

FIN 533. Real Option Valuation

This is an applied course in capital budgeting under uncertainty and flexibility. Traditional NPV analysis assumes that corporate investments are “now or never,” but most corporate projects have a great deal of flexibility in their timing, scale, etc. The objective here is to obtain an in-depth understanding of these problems and the associated real option theory. The theoretical option pricing tools are binomial models and Monte Carlo simulations. The application topics cover all types of typical real options, cases of leasing, R&D, take-over, market expansion, growth values, dot-coms, staged investments, multiple project uncertainties, ranging from standard European and American options to compound and rainbow options. FIN 524, FIN 524B and FIN 534 are both highly recommended. 1.5 credits.

FIN B62 526 Risk Management

Risk management is an increasingly important, but often misunderstood, aspect of corporate financial policy. This course will analyze the whys and hows of financial risk management. The first half of the course will answer the question: Why should firms manage risk? The analysis will draw upon the theory of corporate finance to show how taxes, bankruptcy costs, and the costs of external finance can make risk management a value enhancing activity, and to understand the integration of risk management and corporate financial policy more generally. This underlying theory will be applied to the analysis of risk management issues in a variety of different industries and firms. The second half of the course will answer the question: How should firms manage risk? Risk management strategies employing exchange traded and over-the-counter derivatives such as futures, forwards, options, and swaps on fixed income securities, commodities, foreign currencies, and equities will be analyzed. If time permits, additional topics may be covered, potentially including credit risk, operational risk, settlement risk, and systemic risk. The course will include a rigorous analysis of the relevant theory, but will also emphasize application of this theory through classroom examples, homework problems, and cases. Prerequisites: FIN 524 and FIN 524B. 1.5 Credits.

FIN B62 523B Mergers and Acquisitions

The course will provide an in depth view of the theory and empirical regularities of various corporate control transactions. Specifically, we will discuss valuation of target firms, possible sources of value creation, various motives for mergers, tax consequences of mergers, legal issues in mergers, financing an acquisition, defensive tactics in hostile takeovers, going-private transactions and bidding behavior of acquirers. The method of instruction is a mix of lecture and case analysis. Prerequisite: FIN 534. 1.5 Credits.
FIN B62 500U Financial Markets – Regulation, Washington, D.C. Immersion Course

The regulation of United States financial markets will be examined in this course including key institutions and actors involved in regulation, such as the Federal Reserve, the Department of the Treasury, the Securities and Exchange Commission (SEC), Federal Deposit Insurance Corporation (FDIC), Commodities Futures Trading Commission (CFTC), the National Credit Union Administration (NCUA), Financial Industry Regulatory Authority (FINRA), as well as the United States Senate Committee on Finance and the House of Representatives Committee on Financial Services and regulatory lawyers. The course will emphasize the theory and practice of regulation, and this will be placed into the context of the contemporary financial system and challenges which exist to regulate it effectively, especially in the context of global financial crises. This course is offered in collaboration with Brookings Executive Education, part of the Brookings Institution, a nonprofit public policy research institution. 3 Credits.

FIN B62 500T Financial Markets – Institutions, New York Immersion Course

Major financial institutions and the markets in which they participate will be examined. Key financial institutions will include corporate and investment banking, hedge funds, private equity firms, venture capital firms, fund management, and private wealth management. The markets covered include stocks and bonds, forex trading, and derivatives. Emphasis will be placed on the current trends and future prospects in each institutional area and the markets in which they participate, and how these are related to the global economy, especially in the context of global financial crises. 3 Credits.