

# **FINANCE (EFIN)**

## EFIN 6110 Accounting for Managers (2)

## EFIN 6120 Fincl Statement Analysis (2)

This course explores the principles and techniques for understanding and interpreting financial statements, including statement comparability, income measurement and disclosure, cash flow analysis, ratio analysis and the disaggregation of ratios, quality of earnings, account analysis, and footnote disclosures. The financial relationships of the accounting model are applied to published financial statements. Cases are used extensively.

# EFIN 6200 Decision Models (2)

This course examines the art of solving problems under uncertainty. Course topics include descriptive statistics, probability, sampling distributions, confidence intervals, hypothesis testing and simple and multiple regressions. Methods are applied to management problems drawn from marketing, finance, economics, organizational behavior, and operations management.

#### EFIN 6300 Financial Management I (2)

This course provides a rigorous introduction to the field of financial economics. The first section of the course develops an analytical understanding of the time value of money concept, and applies it through basic techniques for the valuation of stocks, bonds, and investment projects. Various capital budgeting rules are also discussed in this section. The second section focuses on capital markets including the statistical concepts of covariance and diversification and the capital asset pricing model. The third section introduces capital structure policy and discusses the impact of the different financing choices on risk and required return on firm's equity. This section also introduces the notion of weighted average cost of capital.

## EFIN 6310 Financial Management II (2)

This course builds directly on the material covered in Financial Management I. The course focuses on the key policy decisions made in corporate finance and discusses their impact on firm and shareholder value. The course will include an in-depth analysis of firms' financing choices and capital structure and their role in capital budgeting decisions. The course also introduces the different discounted cash flow valuation techniques for the valuation of corporate cash flows. The last third of the course focuses on options, option pricing, and applications of option pricing in corporate finance including warrant and convertible bond valuation.

## EFIN 7100 Options (2)

## EFIN 7110 Portfolio Theory (2)

This course is concerned with the choice of investment strategies with differing risk/return characteristics, in the presence of uncertainty. We will examine the risk/return characteristics of both equities and fixed-income instruments. We will begin by looking at the market structure within which equities are traded, how market indexes are derived, and the various styles of professional asset management. Within the context of fixed-income investments, we will discuss the various theories of the term structure of interest rates, how to derive implied forward rates, and how to measure and manage interest rate risk using duration and convexity. Interest rate futures, options and swaps will also be discussed as instruments for managing interest rate risk in a fixed-income portfolio. Finally, we will discuss several equity valuation measurements and the concept of market efficiency. Empirical evidence for and against efficient markets will be examined, and the basic tenants of Behavioral Finance will be introduced.

## EFIN 7130 Fixed Income Analytics (2)

This course examines the pricing and yield determinants of various fixed income securities including Treasury bills, notes and bonds, strips, corporate bonds, munis, mortgages, and asset-backed securities. Topics include the term structure of interest rates, duration, convexity, immunization, and the various types of risk that can affect the pricing of fixed income securities. Arbitrage-free pricing methods are explained. The course is designed to give students the quantitative tools they need to evaluate streams of fixed-income cash flows.

# EFIN 7140 International Finance (2)

International Finance is the sub-area of finance that studies the international investment decisions concerning real and financial assets. This course considers the concepts and theories of modern multinational financial management and gives participants a solid theoretical and practical background that serves to better understand the importance of risk management in a Multinational Corporation (MNCs) and the particularities of corporate finance and corporate governance in a global context.

## EFIN 7160 Corporate Risk Management (2)

## EFIN 7190 Energy Investment Banking (2)

# EFIN 7200 Game Theory & Finance (2)

This course is an introduction to strategic models of decision-making and equilibrium with applications to economics and finance. Topics to be covered are: Nash Equilibrium, game theory, auctions, dominant strategies, coordination games, extensive form applications, subgame perfection, mixed strategies, applications of mixtures, asymmetric information, moral hazard, evolutionary games and dynamics. The use of critical thinking skills and mathematical analysis will be at the master's-level. Students completing this course will be able to understand the current issues in game theory and finance.



## EFIN 7210 Financial Engineering (2)

This course is designed to introduce students to financial innovation and strengthen the ability to tackle more structured financial problems. While the course is grounded solidly in theory, it also provides a thoroughly applied perspective of the topics: equity and debt, default and credit derivatives and interest rate models.

# EFIN 7220 Financial Modeling (2)

This course is about financial models and their use and simulation using Microsoft Excel. The models covered include Fixed Income Securities, Portfolio Optimization, and Option Pricing. The course content consists of a mix of theoretical models and model application.

## EFIN 7310 Econometrics (2)

Topics covered include econometrics basics, regression, formulas, statistics, variable bias, models, multicollinearity, hypothesis testing, binary variables heteroskedasticity, endogeneity, instrument variables, forecasting and speculation.

## EFIN 7500 Venture Cap & Private Equity (2)