DEGREE REQUIREMENTS

Babson’s MSF degree requires 30 credits of coursework.
- 15 credits – core program
- 15 credits – electives: 9 credits must be Finance electives, 6 credits may be Finance or selected Accounting, Economics, or Mathematics (Quantitative Methods) courses

CORE CURRICULUM

Capital Markets (3 credits)
This course provides an overview of modern capital markets and is intended both for students who are not concentrating in finance (but want to learn more about how markets work) as well as for finance concentrators. The course considers the domestic and the global aspects of capital markets. It begins by studying the basics of fixed-income markets, concentrating on determinants of the yield curve and the term structure of interest rates. It then discusses options and other simple derivatives, including their pricing and how they are traded. Corporate, sovereign, and municipal bond markets, including credit default swaps, are studied. We, then, discuss the interaction between financial markets and financial institutions, including the mortgage markets, mutual funds, commercial banks, investment banks, and hedge funds. The course concludes with equity markets and new electronic equity trading facilities.

Fixed Income (3 credits)
This advanced quantitative course is designed for students interested in fixed-income portfolio management, as well as students interested in the sales and trading of fixed income securities and their related structured products. Topics covered include: (i) bond pricing and day count conventions; (ii) relative value and yield curve construction; (iii) duration, basis point value, and convexity; (iv) pricing and hedging of interest rate currency swaps; (v) Treasury bond futures, conversion factors, and the concepts of cheapest-to-deliver and implied repo; (vi) the repo (GC and special) market; (vii) credit risk and the pricing of high-yield bonds and credit default swaps; and (viii) securitization, mortgage-backed securities, and collateralized mortgage obligations.

Corporate Finance: Evaluating Opportunities (3 credits)
This course is designed for those interested in evaluating complex long-term strategic investment proposals and valuing firms and subsidiaries for merger and acquisition purposes. Building on the foundation of the finance core, it explores finance theory to identify pitfalls, common mistakes, and best practices in corporate valuation. It expands valuation skills by introducing the equity approach and the adjusted present value (APV) valuation method, the preferred approach when capital structure is changing over time (e.g., in private equity transactions). It also covers the identification and valuation of real options embedded in strategic initiatives.

Derivatives: Theory and Practice (3 credits)
This course examines the pricing and use of derivatives in depth. It will cover the mathematical underpinnings of forwards, futures, options, swaps and more exotic derivatives, as well as the practical uses of these derivatives to hedge and manage risk. This course will cover the Black-Scholes option pricing formula, binomial trees and risk-neutral pricing. Applications include financial hedging of foreign exchange risk, commodity risk, and interest rate risk; as well as portfolio immunization techniques.

Financial Data Analysis and Practice (3 credits)
This course trains students how to use data sets for research, how to develop appropriate financial memos and reports for various audiences, and provides some introduction to different aspects of the finance profession. At least four datasets such as (but not limited to) CRSP, Compustat, Bloomberg, and Capital IQ will be introduced. Students will learn how to access and download data, analyze the data, create reports, and provide written and oral reports to financial and nonfinancial audiences. In addition, students will be made aware of professional practices and standards in financial professions to prepare students for rapid entry into the workplace.
ELECTIVE CURRICULUM

Equities (3 credits)
This course will address both theoretical and practical issues that arise in equity valuation and portfolio management. Students will develop a framework for understanding the following: basic valuation techniques (e.g., absolute and relative multiples (COMP CO), Discounted Cash Flow (DCF), and Dividend Discount Model (DDM)), modern portfolio theory, equity portfolio construction, passive versus active management, investing styles, and performance measurement. In addition, a portion of the course involves analysis of issues in Private Equity. These include: analysis of equity swaps, quantitative investing and LBO transactions. Equity valuation and equity portfolio management are as much art as science and we will focus on the challenges equity professionals face in the pursuit of alpha. As part of the course, students will manage a “paper portfolio” in which they will design an investment strategy, execute that strategy and complete a performance attribution on the results.

Risk Management (3 credits)
Risk management of modern corporations has risen to a new pre-eminence in industrial and financial firms. The reasons for this rise, and the techniques and instruments used by risk managers, are the subjects of this course. The course first considers the mechanics and the economic intuition behind the basic tools of financial risk management: forwards, futures, swaps, and options. Students, then, will use their knowledge to build synthetic securities, to exploit arbitrage opportunities, and to alter the risk/return characteristics of corporations. We, then, apply these tools to risk management problems of firms in industries such as energy (oil and natural gas), chemicals, financial services (banks and securities firms), and commodities (gold), and pharmaceuticals (intellectual capital).

Corporate Finance: Raising Capital (3 credits)
This course is designed to help students develop analytical tools and skills to build financing strategies and manage the right-hand side of the balance sheet. It explores the theoretical and practical issues of capital structure design, considers firm financing alternatives, including equity, long-term debt, hybrid securities, leasing, securitization, project finance, and examines the process through which securities are issued. The course also explores share repurchase, dividend policy, and risk management.

Financing and Valuing Sustainability (3 credits)
This course will examine the concepts of “going green” and sustainability in the context of finance and value creation. Students will analyze sustainable technologies, strategies, and business models from the perspective of managers, entrepreneurs, and investors. Basic financial tools such as discounted cash flow, capital budgeting, capital structure, and risk/return will be used to evaluate the feasibility and financial implications of “sustainable” products and practices in a variety of industries and applications.

Managing Portfolios (3 credits)
This course is designed for students interested in investment management, portfolio management, and/or risk management. The course will augment and extend students’ basic finance skills, tools, and concepts learned in core finance courses and in other courses in the Investments Concentration curriculum. In the context of a variety of individual and institutional investor types, from high net worth individuals to endowments, students will explore the simultaneous management of positions in multiple securities using heuristic, statistical, and other mathematical tools. Topics covered include client assessment, investment objective setting, investment strategy formulation, security selection, allocation of risky assets, optimal portfolio selection, and the use of derivatives to meet investment objectives. Through projects and readings, students will explore these topics in portfolio theory and practice. Tools and theories used widely by portfolio management professionals are fundamental to this course. In addition to the traditional course work, the students will study and prepare investment proposals, periodic client communications, and conduct portfolio performance evaluations.

Babson College Fund (6 credits)
The Babson College Fund is a student-managed portion of the Babson College endowment. The Trustees of the Babson College Fund select graduate and undergraduate students to be portfolio managers. If selected, students may receive up to six credits for this activity. Students must apply.
Real Estate Financial Modeling (3 credits)
This course will address the practical and theoretical issues involved in estimating cash flows and values of a wide variety real property, financial interests, investment interests and deal structures using discounted cash flow (DCF) techniques and sensitivity analyses. Students will solve real estate cash flow and DCF problems using models for property, portfolio, debt and equity interests for a variety of commercial real estate property types. Students will detailed modeling applications necessary to estimate both cash flows and values in the world of real estate finance and capital markets. Students will use and learn both Excel and industry standard software applications in the process of modelling lease by lease cash flows at the property level, portfolio cash flow consolidations, related debt structures, including first mortgage and mezzanine debt, and equity waterfall structures. This course includes explanation of the theoretical issues and concepts involved in these practical applications.

Financial Trading Strategies (3 credits)
In this course, students will learn to develop and implement strategies to make effective trading and investment decisions in an uncertain environment. Students will build quantitative models that identify, quantify, and manage the risks and expected return associated with these strategies. The course is based on an experiential learning approach, in which trading simulation software provides a platform for delivering learning-by-doing cases. Specific cases covered in the course include alternative trading venues, algorithmic trading, value-at-risk, crude oil and natural gas futures, and portfolio insurance. The course will also cover the fundamental concepts of market microstructure, including bid-ask spreads, price discovery, information asymmetry, liquidity, and inventory risk.

Finance for New Ventures (3 credits)
This course is meant for entrepreneurs and small business owners who want a detailed understanding of the financial implications of strategic decisions as they start and grow their ventures. The course covers the entrepreneur’s and investor’s perspectives, including pre- and post-money value, capitalization tables, dilution, and liquidation preferences. The impact of debt financing on financial statements and returns also is covered. Valuation methods include discounted cash flow, multiples, and the VC method. Risk management techniques incorporating staging, milestones, real options, and simulation are used to better assess uncertainty and then structure transactions to mitigate risk.

Investment Banking and Financial Advisory (3 credits)
This course is designed to provide a practical application of corporate finance skills to a variety of corporate restructuring transactions. Mergers and acquisitions, initial public offerings, private equity placements, senior and mezzanine debt issuances, leveraged buyouts, and other complex financial restructuring transactions are reviewed. We will explore the economic rationale and process of each transaction, and place heavy emphasis on the role of an associate professional in analyzing each situation. Students will build and apply models typically used in practice by investment banks, commercial banks, and corporate finance consultants. The course is designed for those interested in careers in corporate finance or strategic planning.

Independent Research in Finance (3 credits)
This course provides students with the opportunity to take a deep dive into a financial topic of their interest, working under the supervision of a faculty advisor.

Additional electives are available across the following departments:
- Finance
- Accounting
- Economics
- Mathematics (Quantitative Methods)
- Marketing (Strategy and Tactics of Pricing)
- Experiential Learning (Finance approved only)

If you have any questions, please contact the Office of Graduate Admissions at 781 239-4317.