

FINANCE

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**Department of Finance
Eli Broad College of Business and
The Eli Broad Graduate School of
Management**

250 Careers in Finance

Fall, Spring. 1(1-0) R: Open to undergraduate students in the Business - Admitted major or in the Finance Major or approval of department.

Exploration of the various specialty areas within the field of finance, including career options for new college graduates and employment trends. Understanding the minors offered to supplement the major, the student organizations that augment classroom learning, and the professional certifications desired by employers.

293 Cooperative Education for Business Students

Fall, Spring. 1(1-0) A student may earn a maximum of 3 credits in all enrollments for this course. Interdepartmental with Accounting and Economics and Hospitality Business and Management and Supply Chain Management. Administered by Supply Chain Management. R: Approval of department. SA: MSC 293

Integration of pre-professional educational employment experiences in industry and government with knowledge and processes taught in the student's academic program. Educational employment assignment approved by the Department of Supply Chain Management.

311 Financial Management

Fall, Spring, Summer. 3(3-0) P: (ACC 201 or ACC 230) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 430 or STT 441) R: Open to undergraduate students in the Accounting major or in the Business - Admitted major or in the Human Resource Management Major or in the Management Major or in the Marketing Major or in the Supply Chain Management Major or in the Finance Major or in the Actuarial Science Major or in the Actuarial Science Minor. Not open to students with credit in FI 311H.

Overview of financial management for business majors. Analysis of financial statements, markets, and assets. Risk and valuation, corporate budgeting and investment decisions. International and ethical implications. Current events applications.

311H Financial Management

Fall. 3(3-0) P: (ACC 201 or ACC 230) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 430 or STT 441) R: Open to sophomores or juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to students in the School of Hospitality Business. Not open to students with credit in FI 311.

Analysis of financial statements, markets, assets, and liabilities. Risk and valuation, capital budgeting and investment decisions. International and ethical implications. Current events applications.

312 Introduction to Investments

Fall, Spring, Summer. 3(3-0) P: (FI 311 or FI 311H) and (ACC 202 or ACC 230) and (STT 315 or STT 200 or STT 201 or STT 351 or STT 421 or STT 231 or STT 441) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Theoretical and empirical analyses of securities. Risk and return formation. Security analysis and concepts of market efficiency. Common stocks, bonds, options, futures, and mutual funds.

320 Introduction to Finance

Fall, Spring. 3(3-0) R: Not open to students in the Accounting major or in the Business - Admitted major or in the Business-Preference major or in the Human Resource Management Major or in the Management Major or in the Marketing Major or in the Supply Chain Management Major or in the Finance Major. Not open to students with credit in FI 311 or HB 311.

Introduction to stocks, bonds, mutual funds, financial statement analysis, capital budgeting, financial planning.

321 Theory of Investments

Fall, Spring. 3(3-0) P: FI 311 or FI 320 R: Open to juniors or seniors in the Actuarial Science Major or in the Actuarial Science Minor or in the Economics Major. Not open to students with credit in FI 312.

Theoretical analysis of common stocks, bonds, options and futures. Tradeoff between risk and return, market efficiency, efficient portfolios and CAPM. Cash flow evaluation and option evaluation.

355 Financial Modeling

Fall, Spring, Summer. 3(3-0) P: FI 311 and (FI 312 or concurrently) R: Open to students in the Finance Major. SA: FI 455

Development of computer spreadsheet-based models to analyze corporate financial strategies and valuation issues.

370 Introduction to Financial Planning and Wealth Management

Fall. 3(3-0) P: FI 311 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Techniques used to develop and implement comprehensive plans to achieve a person's overall financial objectives. Budgeting, liability management, investing, tax planning, risk management, employee benefits, retirement planning, and estate planning.

380 Principles of Insurance and Risk Management

Fall. 3(3-0) P: (FI 311 or FI 320) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 441) RB: Knowledge of calculus is recommended but not required. R: Open to students in the Insurance and Risk Management Minor or approval of department.

Overview of techniques for measuring and managing risk. Pure risks related to mortality, health-related expenses, property damage, and product liability. Management techniques studied include risk assumption, prevention, diversification, and transfer via insurance and non-insurance market mechanisms.

393 Introduction to International Business

Fall, Spring, Summer. 1 to 3 credits. Fall: Abroad. Spring: Abroad. Summer: Abroad. Interdepartmental with Accounting and General Business and Business Law and Hospitality Business and Management and Marketing and Supply Chain Management. Administered by Marketing. R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the School of Hospitality Business.

Introduction to the context of international business delivered on-site in foreign settings. Fundamental concepts and principles of globalization such as multinational corporations, foreign markets and economies, internal and external market transactions, international law, cultural influences, and multinational business strategies.

413 Management of Financial Institutions

Fall, Spring, Summer. 3(3-0) P: FI 311 R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Management, decision-making and policy formulation for depository and non-depository financial institutions emphasizing commercial banking. Savings banks, credit unions and non-bank financial institutions including investment banks.

414 Advanced Business Finance (W)

Fall, Spring, Summer. 3(3-0) P: Completion of Tier I Writing Requirement and FI 311 and (FI 312 or FI 321) R: Open to seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Advanced financial management of business firms. Theoretical analysis and case applications. Capital budgeting, capital structure, valuation, risk management, mergers, and corporate restructuring.

422 Financial Data Analytics

Spring. 3(3-0) P: (CSE 102 or CSE 231) and FI 311

Analysis of real-world financial data in a variety of settings. Apply textual analysis to large documents, identifying "sentiment" in search data, and back-testing trading strategies. Develop programming skills to collect and prepare data for analysis.

424 Deep Learning and Neural Networks in Finance

Fall. 3(3-0) P: (CSE 102 or CSE 231) and FI 311

Basic concepts of deep learning and neural networks in finance and economics. Implement deep learning methods with state-of-the-art algorithms in a variety of machine learning packages.

425 Law and Economics (W)

Fall. 3(3-0) Interdepartmental with Economics. Administered by Economics. P: (EC 251H or EC 301) and Completion of Tier I Writing Requirement

Application of economic analysis to the law. Property rights, takings, the Coase Theorem. The economics of regulation, crime and punishments, liability law, and public choice.

FI—Finance

- 444 Entrepreneurial Finance**
Spring. 3(3-0) P: FI 311 or FI 320 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and open to juniors or seniors in the Entrepreneurship and Innovation Minor. Approval of department; application required.
Financing, valuation and sale of entrepreneurial ventures. Business plans, financing sources, financial contracting, real options, staged investments, and exit strategies.
- 451 International Financial Management**
Fall, Spring, Summer. 3(3-0) P: FI 311 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Financial management of multinational firms. Theoretical and applied aspects of international capital budgeting, capital structure, cash management, asset pricing, and risk management. Cross-cultural and ethical considerations.
- 457 Security Analysis**
Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: FI 312 R: Approval of department.
Fundamental analysis of individual stocks. Discounted cash flow valuation, relative valuation, special situations. Management of a real-money stock portfolio, the Michigan State University Student Investment Fund.
- 460 Estate and Income Tax Planning**
Fall. 3(3-0) R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management. C: FI 370 concurrently.
Estate planning and income tax planning issues for the financial planner and wealth management advisor.
- 470 Advanced Financial Planning and Wealth Management**
Spring. 3(3-0) P: FI 370 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Advanced estate, tax and retirement planning. Client management, planning tools and software applications. Creation of a comprehensive financial plan.
- 473 Debt and Money Markets**
Spring. 3(3-0) P: FI 312 R: Open to students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Role and nature of international debt and money markets. Corporate and government bond valuation, fixed income derivative instruments and bond portfolio management. Special role of "time" in debt and money markets.
- 478 Investment Strategies and Speculative Markets**
Spring. 3(3-0) P: FI 311 and FI 312 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Pricing, trading strategies, hedging applications, and markets for forwards, futures, swaps, and options.
- 480 Financial Risk Management**
Spring. 3(3-0) P: (FI 311 or FI 320) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 441) and FI 380 RB: Knowledge of calculus is recommended but not required. R: Open to students in the Insurance and Risk Management Minor or approval of department.
Ways in which risks are quantified and managed by financial institutions. Nature of financial institutions and their regulation, the Basel Accords, coherent risk measures, value at risk, copulas, credit risk, operational risk, liquidity risk, and the financial crisis of 2007.
- 481 Crises, Insurance, and Risk Management**
Fall. 3(3-0) P: (FI 311 or FI 320) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 441) R: Open to students in the Insurance and Risk Management Minor or approval of department.
Various crises, including financial crises, and natural and man-made disasters. Repercussion of such crises on financial-industry and insurance regulations on the structures of the financial and insurance industries and on the products offered and on the pricing of these products.
- 490 Independent Study**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to seniors. Approval of department.
Supervised independent study of special topics in finance.
- 491 Topics in Finance**
Fall of even years. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P: FI 311 R: Open to juniors or seniors.
Current and emerging issues in finance to supplement and enrich existing courses.
- 801 Managerial Finance**
Fall, Spring, Summer. 1 to 3 credits. RB: A first course in Accounting. R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to MBA students.
Short-, intermediate- and long-term problems in Finance. Financial planning and control. Applications in domestic and international settings.
- 830 Introduction to Financial Planning and Wealth Management**
Fall, Spring. 3(3-0) P: FI 801 R: Open to students. Not open to students with credit in FI 370.
Techniques used to develop and implement comprehensive plans to achieve a person's overall financial objectives. Budgeting, debt management, investing, tax planning, risk management, employee benefits, retirement planning, and estate planning.
- 832 Principles of Insurance and Risk Management**
Fall, Spring. 3(3-0) P: FI 801 Not open to students with credit in FI 380.
Techniques for measuring and managing risk. Pure risks related to mortality, health-related expenses, property damage, and product liability. Management techniques studied include risk assumption, prevention, diversification, and transfer via insurance and non-insurance market mechanisms.
- 836 Estate and Income Tax Planning**
Fall, Spring. 3(3-0) P: FI 801 Not open to students with credit in FI 480.
Issues in estate planning and income tax planning for the financial planner and wealth management advisor.
- 838 Advanced Financial Planning and Wealth Management**
Fall, Spring. 3(3-0) P: FI 801 and FI 830 and FI 832 and FI 836 Not open to students with credit in FI 470.
Advanced retirement planning, client management, planning tools and software applications. Case-based capstone course resulting in the creation of a comprehensive financial plan.
- 844 Corporate Financial Strategies**
Fall. 1 to 3 credits. P: MBA 832 or approval of department RB: FI 851 or FI 845 R: Open to MBA students or approval of department.
Applying financial strategies to managerial decision making.
- 845 Financial Modeling and Simulation I**
Fall, Spring. 1 to 3 credits. P: MBA 832 or approval of department RB: FI 851 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Applications of financial theory through computer modeling. Financial forecasting, cash flow modeling, and valuation.
- 846 Financial Modeling and Simulation II**
Fall, Spring. 1 to 3 credits. P: FI 845 or approval of department RB: FI 851 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Application of financial theory using computer modeling. Portfolio optimization, risk measurement, and option pricing.
- 847 Corporate Strategies and Risk Management**
Fall. 1 to 3 credits. P: FI 844 RB: FI 845 and FI 851 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Identifying corporate strategies to help manage business, financing, and competitive risks. Case studies.
- 850 Introduction to Investments I**
Spring. 1 to 3 credits. P: MBA 832 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Essential financial theories and quantitative tools related to the field of investments. Topics include behavior and distribution of stock returns, mean-variance optimization model of portfolio selection, basic asset pricing theories and market efficiency.
- 851 Introduction to Investments II**
Spring. 1 to 3 credits. P: FI 850 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Investment management, portfolio performance evaluation, active portfolio management, essentials of bonds and derivatives, and essentials of international diversification.

- 852 Financial Derivatives I**
Spring. 1 to 3 credits. P: FI 851 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Introduction to pricing, trading strategies, and hedging applications of forward and futures contracts, swaps, and options.
- 853 Debt and Money Instruments and Markets**
Fall. 1 to 3 credits. P: MBA 832 and FI 851 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Fixed-income security markets. Valuation of traded instruments.
- 854 Fixed Income Instruments**
Fall. 1 to 3 credits. P: FI 853 or approval of department R: Open to master's students in the Finance major and open to MBA students.
Advanced fixed income security models. Valuation of instruments traded using derivative securities pricing.
- 855 Financial Derivatives II**
Spring. 1 to 3 credits. P: FI 851 and FI 852 or approval of department R: Open to master's students in the Finance major and open to MBA students.
Derivatives pricing and applications to corporate securities, structured products, and credit default swaps.
- 857 Security Analysis and Portfolio Management**
Fall, Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: FI 851 R: Open to master's students in the Finance major and open to MBA students. Approval of department.
Fundamental analysis of individual stocks. Discounted cash flow valuation, relative valuation, and special situations. Management of student-run investment fund.
- 859 Mergers and Acquisitions**
Spring. 1 to 3 credits. P: MBA 832 or FI 801 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Provides a broad overview of corporate mergers and acquisitions from the finance perspective.
- 859 Mergers and Acquisitions**
Fall. 1 to 3 credits. P: MBA 832 or FI 801 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Provides a broad overview of corporate mergers and acquisitions from the finance perspective.
- 860 Multinational Corporate Finance**
Fall. 1 to 3 credits. P: MBA 832 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Corporate financial management in a multinational setting.
- 861 International Financial Markets and Risk Management**
Fall. 1 to 3 credits. P: MBA 832 or approval of department R: Open to master's students in the Finance major and open to MBA students.
Financial investments and risk management in a multinational setting.
- 862 Corporate Strategy Valuation**
Spring. 1 to 3 credits. P: MBA 832 or approval of department R: Open to master's students in the Finance major and open to MBA students or approval of department.
Measuring and managing the valuation of corporate strategies.
- 863 Corporate Restructuring and Governance**
Fall. 1 to 3 credits. P: (MBA 832 or FI 801) and FI 859 R: Open to master's students in the Finance major and open to MBA students.
Provides a broad overview of mergers, corporate restructuring, divestitures and bankruptcy from the finance perspective.
- 865 Corporate Real Options Valuation**
Spring. 1 to 3 credits. P: MBA 832 or approval of department R: Open to master's students in the Finance major and open to MBA students.
Application of the real options methodology to analyze practical problems in corporate finance.
- 869 Entrepreneurial Finance and Venture Capital**
Spring. 1 to 3 credits. P: MBA 832 or FI 801 R: Open to master's students in the Finance major and open to MBA students.
Introduction to the financing and valuation of entrepreneurial startups, venture capital and private equity. How to prepare a successful business plan to raise financing from venture capitalists. Structuring venture capital and private equity deals.
- 870 Venture Capital and Private Equity**
Spring. 1 to 3 credits. P: (MBA 832 or FI 801) and FI 869 R: Open to master's students in the Finance major and open to MBA students or approval of department.
Advanced topics in the financing of entrepreneurial startups, venture capital and private equity. Valuation for entrepreneurial startups, venture capital and private equity, and institutions. Corporate venture capital. Venture capital investing and fundraising. Private equity investments. Sale of venture capital-backed entrepreneurial firms, and initial public equity offerings.
- 872 Financial Data Analytics I**
Fall. 1 to 3 credits. R: Open to MBA students or approval of department.
Introduction to the analysis of real-world financial data in a variety of settings. Applying textual analysis to large documents, identifying "sentiment" in Google search data, and back-testing trading strategies. Developing the programming skills necessary to both collect and prepare data for analysis. Identifying, downloading, cleaning, and shaping data.
- 873 Financial Data Analytics II**
Fall. 1 to 3 credits. P: FI 872 R: Open to MBA students or approval of department.
Advanced application of data analysis to finance. Automating data acquisition, to apply textual analysis to large documents and transcripts. Analyzing weather data, geographic data, corporate patent data, and posts on social media. Examining how the information in these databases is related to financial outcomes.
- 890 Independent Study**
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: MBA 832 R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management. Approval of department.
Faculty-guided research projects.
- 891 Topics In Finance**
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P: (FI 801 or MBA 832) or (PIM 841 and PIM 842)
Current and emerging issues in corporate finance, investments, and financial modeling to supplement and enrich existing courses.
- 980 Theory of Finance**
Fall. 3(3-0) R: Open only to doctoral students in the College of Business or approval of department.
Introduction to the financial theory of the firm. Theoretical models dealing with capital structure, cost of capital, dividend policy and leasing.
- 981 Corporate Finance Theory**
Spring of odd years. 3(3-0) RB: FI 980 R: Open only to doctoral students in the College of Business.
Theoretical foundations. Recent empirical research in capital structure, dividend policy, and agency theory.
- 982 Investment Theory**
Spring of odd years. 3(3-0) RB: FI 980 R: Open to doctoral students in the Eli Broad College of Business and The Eli Broad Graduate School of Management.
Market efficiency, stochastic processes, option pricing, efficient set mathematics, intertemporal asset pricing and arbitrage pricing theory.
- 999 Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Department of Finance.
Doctoral dissertation research.