

BUFI - FINANCE

BUFI 205 Intro to Data Analysis & Model (3 Credit Hours)

This course is an introduction to the statistical and quantitative analysis of data for modeling, prediction, optimization, and problem solving. Microsoft Excel will be used extensively throughout the course for data processing, exploration, model implementation, and to develop and run simulations. Students will also develop analytical methods for problem solving and model analysis. A main goal of the course is to develop quantitative techniques for evidence-based decision making in a range of fields, including business, medical and health sciences, public policy, government, and problems within social and environmental frameworks. Topics include Excel functions and formulas; data formatting, sorting, and filtering, pivot tables, regression analysis, linear and integer programming, scheduling problems, data mining, queuing, network and cluster analysis, financial models, and time series forecasting.

Academic Level: Undergraduate

BUFI 220 Intro to Trading and Markets (3 Credit Hours)

This course introduces how modern markets function and how trades are executed. Students study market microstructure, quoting and price discovery, order types, bid-ask spreads, and order book depth across major asset classes. Using real-time or simulated data, students practice building and documenting a complete trade lifecycle—from idea to order entry, execution, and post-trade review, while applying basic risk concepts (volatility, correlation, drawdown) and simple position-sizing rules. The course emphasizes ethical market conduct, trade documentation, and communication through a rules-based trading plan and structured trade log.

Academic Level: Undergraduate

BUFI 300 Arbitrage Pricing Theory (3 Credit Hours)

This course develops a factor-based view of markets using Arbitrage Pricing Theory (APT). Students examine multi-factor asset pricing, estimate factor exposures, and interpret risk premium using empirical data. The course emphasizes translating theory into practice: building factor models, testing hypotheses with regression, and evaluating anomalies while accounting for model risk and realistic constraints. Hands-on work in a statistical package (e.g., Stata) focuses on data preparation, estimation, and communication of results in a trading/portfolio context. The course prepares students to implement factor exposures through ETFs and to evaluate systematic strategies.

Academic Level: Undergraduate

BUFI 301 Exchange-Traded Funds & Index Strategies (3 Credit Hours)

This course examines ETFs and index strategies as the primary implementation layer for modern asset management. Students study index construction and rebalancing, replication methods, sources of tracking difference, and the creation/redemption mechanism that links ETFs to underlying markets. Emphasis is placed on liquidity, premiums/discounts to NAV, and execution planning under realistic trading costs. Students build ETF-based sleeves aligned with factor exposures and client constraints, evaluate performance versus benchmarks, and communicate decisions through short capital allocation memos suitable for an investment committee.

Academic Level: Undergraduate

BUFI 302 Personal Finance (3 Credit Hours)

Personal Finance equips students to plan, protect, and grow personal wealth across life stages. Core topics include budgeting and financial recordkeeping; taxes; banking and payment systems; consumer credit and purchasing; housing and mortgages; insurance (property, auto, health, and life); foundational investing in stocks, bonds, mutual funds, and ETFs; and retirement and estate planning.

Academic Level: Undergraduate

BUFI 315 Business Finance Concepts and Skills (3 Credit Hours)

Business Finance introduces the principles and practices of financial management, including financial statement analysis; the time value of money; risk and return; stock and bond valuation; interest rates; cost of capital; and capital budgeting. Students develop analytical and computational skills for real-world decision-making through coursework that integrates spreadsheet tools (e.g., Excel) and financial calculators.

Academic Level: Undergraduate

BUFI 319 Technical Trading Systems (3 Credit Hours)

This course builds systematic trading skills from idea to implementation. Students evaluate technical and behavioral market hypotheses, translate them into rule-based signals, and test strategies using historical data with disciplined backtesting and validation. Emphasis is placed on avoiding common research traps (overfitting, data leakage), incorporating execution realism (spreads, slippage, market impact), and documenting strategies so they can be reviewed professionally. Students deliver a complete “strategy package” that includes the specification, testing results, risk controls, and a compliance-aware explanation of data provenance and trading constraints.

Academic Level: Undergraduate

BUFI 320 Trading Fundamentals (3 Credit Hours)

This course is designed to teach students the use, nature, and availability of financial data. The course will focus on ways to assess news, economics, equities, options, foreign exchange commodities, and bonds. In addition, students will develop expertise in how to use industry standard trading platforms. As part of the course, the students will earn full Bloomberg certification. The study also introduces the basics of applied statistics and Bloomberg in Excel. Students taking the course will require Bloomberg terminal access. 3.000 Credit hours. Prerequisites: BUAC 201 min grade “C” Role in the Curriculum This course counts as a Business Elective for the Business Administration major and minor. For other majors, this course counts as a general elective.

Academic Level: Undergraduate

BUFI 322 Investments (3 Credit Hours)

Investments develops practical skills for analyzing securities and constructing portfolios. Topics include asset classes and market structure; macroeconomic and industry analysis; company analysis and valuation; behavioral finance; portfolio performance evaluation; risk and return; diversification; asset pricing models (CAPM, multifactor models, and APT); and mutual funds and ETFs. Students use Excel, simulations, Bloomberg, and AI-based analytics to evaluate investments and make informed portfolio decisions.

Academic Level: Undergraduate

BUFI 323 Fixed Income Securities (3 Credit Hours)

This course develops the analytics used to value and manage fixed-income instruments and interest-rate risk. Students study the term structure of interest rates, yield curve dynamics, duration/convexity, key-rate exposures, and credit spreads. Emphasis is placed on linking rate and credit movements to security prices and portfolio risk, and on connecting those movements to corporate financing decisions and valuation. Students construct and stress-test fixed-income positions under curve and spread scenarios, communicate risk trade-offs, and prepare fixed-income inputs for the Portfolio Management capstone.

Academic Level: Undergraduate

BUFI 415 Advanced Business Finance (3 Credit Hours)

This course advances corporate finance into transaction-grade valuation and financial policy. Students build integrated models to evaluate firm value, capital structure, payout choices, and significant corporate actions, including mergers and leveraged buyouts. Emphasis is placed on defensible assumptions, scenario design, and triangulation of valuation across multiple market checks (DCF, comparables, transaction logic). Students produce professional recommendations supported by model audit trails, sensitivity packs, and a clear articulation of risks and constraints. The course prepares students to incorporate firm-level valuation updates into portfolio decisions in Portfolio Management.

Academic Level: Undergraduate

BUFI 490 Portfolio Management (3 Credit Hours)

This capstone course integrates valuation, factor investing, ETFs, and fixed income into a governed portfolio management process. Student teams develop and operate under an Investment Policy Statement (IPS), translate objectives and constraints into portfolio design, implement trades with execution awareness, and evaluate results through performance and risk attribution. Emphasis is placed on risk budgeting, tracking error discipline, compliance documentation, and client-ready reporting. Teams run investment committee meetings, produce periodic fact sheets, and deliver a final IC presentation that explains outcomes, decisions, and recommended next steps.

Academic Level: Undergraduate

BUFI 510 Financial Management (3 Credit Hours)

This course equips students with the tools and judgment to make sound financial decisions. Students learn to analyze financial statements and build models; evaluate investments using net present value (NPV) and related methods; estimate risk and cost of capital; assess capital structure and leverage; value projects and firms that incorporate debt; and manage short-term financing, cash, credit, and inventory. Students will understand what constitutes an optimal capital structure and sound capital-budgeting decisions—and how to determine them—as well as the core principles of short-term cash management. Learning is applied through assignments and exams, financial simulations, case studies, and weekly discussions, using spreadsheets and financial calculators.

Academic Level: Graduate

Enrollment is limited to students with a program in Business Administration.

Enrollment is limited to Graduate level students.

BUFI 3020 Personal Finance (3 Credit Hours)

Equivalent to BUFI 302. Additional fees may exist.

Academic Level: Undergraduate