MS BUSINESS CORE (MSBC)

Courses

MSBC 5015 (1.5) Managerial Economics

Studies the elements of the business firm's fundamental problem: how to maximize profits. Develops for each element managerial theory based upon introductory and intermediate level microeconomics. Analyzes various applications and misapplications of relevant concept, primarily through case studies. Differential calculus and statistics are used throughout the course.

Requisites: Restricted to Finance (FNCE-MS) or Real Estate (REAL-MS) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5020 (1.5) Financial Accounting

Introduces the financial reporting system used by business organizations to convey information about their economic affairs. Develops an understanding of financial reports and what they tell about a business enterprise. Focuses on how alternative accounting measurement rules represent different economic events in financial reports.

Requisites: Restricted to Finance (FNCE-MS) or Real Estate (REAL-MS) majors only

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5031 (3) Quantitative Methods in Finance

Covers foundations for statistical reasoning and statistical applications in business. Topics include graduate level treatment of descriptive statistics, probability, probability distributions, sampling theory and sampling distributions and statistical inference (estimation and hypothesis testing) applied to the field of finance. Provides an introduction to topics such as regression analysis, analysis of variance, time series forecasting, decision analysis, index numbers, and nonparametric methods.

Grading Basis: Letter Grade

MSBC 5032 (3) Real Estate Data Analysis

Covers foundations for statistical reasoning and statistical applications in business. Topics include graduate level treatment of descriptive statistics, probability, probability distributions, sampling theory and sampling distributions and statistical inference (estimation and hypothesis testing) applied to real estate. Provides an introduction to topics such as regression analysis, analysis of variance, time series forecasting, decision analysis, index numbers, and nonparametric methods.

Requisites: Restricted to REAL-MS students only.

Grading Basis: Letter Grade

MSBC 5060 (3) Corporate Finance

Analyzes the implications of modern finance theory for the major decisions faced by corporate financial managers. Develops the basic skills necessary to apply financial concepts to the various problems faced by a firm. Includes capital budgeting, capital structure, long term financing, short term financial management and financial planning topics. **Requisites:** Restricted to Finance (FNCE-MS) or Real Estate (REAL-MS) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5070 (3) Survey of Business Analytics

Designed as an introduction to Business Analytics, which considers the extensive use of data, methods and fact-based management to support and improve decision making. Business intelligence focuses on data handling, queries and reports to generate information associated with products, services and customers, business analytics uses data and models to explain business performance and how it can be improved. The class will be built on heavy hands-on coding; it will introduce and subsequently involve extensive use of Python.

Requisites: Restricted to MS Business Analytics (BUAN-MS) majors and MKAG-CERG students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5180 (3) Machine Learning in Python

This course exposes the students to commonly used platforms for statistical and predictive analytics. The class will go into depth of analytics using Python. Students will learn to analyze large datasets, including textual analytics such as twitter-stream analysis. The class will focus on predictive analytics.

Requisites: Restricted to Business Analytics (BUAN-MS) majors only.

Grading Basis: Letter Grade

MSBC 5220 (3) Investment Management & Analysis

Covers managing investment portfolios by blending academic theories and evidence with practitioner experience. Topics include risk and return relationships, securities, value theory (capital asset, arbitrage, and option pricing), portfolios, and performance evaluations.

Requisites: Restricted to Finance (FNCE-MS) or Real Estate (REAL-MS)

majors only.

Grading Basis: Letter Grade

MSBC 5460 (3) Supply Chain Strategy

Introduces students to the fundamental principles underlying supply chains, and focuses on the integration with both operations and logistics.

Equivalent - Duplicate Degree Credit Not Granted: MBAX 6460

Requisites: Restricted to Supply Chain Management (SCMN) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5480 (3) SCMN Experiential Projects

Provides an opportunity to execute a project for a company, integrating course work knowledge in an applied capstone experience. Allows first hand exposure to the business analytics as both an observer and creator of the business analytics process. Students work closely with an area client company to solve an important business analytics problem under the close supervision of the instructor.

Repeatable: Repeatable for up to 6.00 total credit hours.

Requisites: Restricted to Supply Chain Management (SCMN) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5490 (3) BUAN Experiential Projects

Provides an opportunity to execute a project for a company, integrating course work knowledge in an applied capstone experience. Allows first hand exposure to the business analytics as both an observer and creator of the business analytics process. Students work closely with an area client company to solve an important business analytics problem under the close supervision of the instructor.

Requisites: Restricted to Business Analytics (BUAN-MS) majors only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: MS: Business Core

MSBC 5600 (1.5) Real Estate Principles

The course provides students with an introduction to the foundational terms, concepts, principles, and formulas fundamental to the business of real estate. It establishes the foundation for other real estate courses. Course content includes legal concepts including property rights and title, mortgage loan types, calculations and decisions, an introduction to time value of money and income capitalization, and real estate investment valuation and decision making utilizing the most common income valuation methods. Instruction and course format are traditional lecture and conversational.

Requisites: Restricted to REAL-MS students only.

Grading Basis: Letter Grade

MSBC 5610 (3) Real Estate Finance and Investment

The primary objectives of this course are to: (1) describe, analyze, and compare the features of residential mortgage loans, commercial mortgage loans, and commercial leases; (2) conduct income property investment analyses and develop the technical competence necessary to structure basic real estate transactions; (3) understand the operations and valuations of private equity funds and real estate investment trusts (REITs), and how real estate is securitized and sold to everyday investors.

Requisites: Restricted to REAL-MS students only.

Grading Basis: Letter Grade

MSBC 5680 (3) Optimization Modeling

Focuses on formulating decision problems as mathematical models and employing computational tools to solve them. Microsoft Excel is used as the main modeling platform but the course will also cover advanced tools, such as modeling languages. Optimization modeling will be illustrated in problems associated with operations, marketing, management, and finance. Integrates topics from decision analysis and operations management as they relate to modeling management decisions.

Requisites: Restricted to Master of Business Admin (MBAD), MBA with Dual Degree (DMBA), Joint Juris Doctor/MBA (JMBA), Professional MBA Program (PMBA), MS Supply Chain Management (SCMN-MS) or MS Business Analytics (BUAN-MS) majors only.

Grading Basis: Letter Grade