

BU.667 (UNDERGRADUATE STUDIES)

Courses

BU.667.310. Business Analytics. 3 Credits.

This course is designed to equip you with practical and hands-on knowledge of business analytics, covering the three main categories of descriptive, predictive, and prescriptive analytics. We will begin by delve into data preprocessing using Tableau, where you will learn how to transform and manipulate data for analysis. You will also learn about storytelling with dashboard visualizations, clustering, text mining, and association rules, all of which are part of descriptive analytics. We will then explore several predictive modeling techniques, including linear regression, logistic regression, K-Nearest Neighbors, and classification trees, which are part of predictive analytics. We will use Microsoft Excel to build models that predict outcomes and make data-driven decisions. Lastly, we will cover prescriptive analytics, where you will learn how to use optimization techniques such as Linear Programming, Integer Programming, Decision Trees, and Monte Carlo Simulation to make optimal business decisions. By the end of the course, you will have the necessary skills to analyze and interpret data, build predictive models, and make optimal business decisions using various techniques of business analytics.

AS Foundational Abilities: Science and Data (FA2)

BU.667.311. Economics for Decision Making. 3 Credits.

This is a microeconomics course with emphasis on the application of economic principles and methodologies to private and managerial decision problems. Major topics include consumer choice and market demand, costs and profit maximization, market structures, output/price decisions, and strategic interactions.

AS Foundational Abilities: Science and Data (FA2), Ethics and Foundations (FA5)

EN Foundational Abilities: Engagement with Society (FA4), Ethical Reflection (FA5)

BU.667.312. Marketing Management. 3 Credits.

This course provides a rigorous and comprehensive introduction to contemporary marketing principles and practices. We will cover the basic concepts of market definition, consumer behavior, and the principal marketing functions: product line development, pricing, distribution, promotion, salesforce management, advertising, research, and planning. In addition, we will examine the methodology of marketing research to build the tools you will need to interpret scientific findings and base decisions on them. By the end of this course, students are expected to acquire an understanding of basic marketing concepts, analyses, and activities that comprise marketing management; gain an understanding of the elements of the marketing mix and their interaction; practice the process of analyzing a marketing situation or opportunity, formulating market strategy, and developing and implementing a marketing plan; solve marketing related problems; interpret and deliver the proposed solution; and develop compelling yet balanced arguments for the recommendations.

AS Foundational Abilities: Science and Data (FA2)

EN Foundational Abilities: Engagement with Society (FA4)

BU.667.313. Principles of Finance. 3 Credits.

This course covers central issues in financial management and corporate finance. Students will learn how financial managers make investment, financing and other decisions and what are the tools they use to reach such decisions. Topics covered include time value of money, risk, valuation, capital structure, capital budgeting, dividend policy and mean-variance portfolio selection. The course provides the analytical tools and the financial theories needed to implement sound financial decisions within a corporation (and outside of a corporation). Ideas are presented in a cohesive way within the framework of the no-arbitrage principle, the fundamental principle shaping all aspects of modern finance. Command of the subject is crucially important for anyone considering a career not only in investment banking, investment management or trading, but also in general management, corporate strategy, management consulting, entrepreneurship, and the non-profit world.

AS Foundational Abilities: Science and Data (FA2)

BU.667.314. Operations Management. 3 Credits.

This course aims to (1) direct your attention to fundamental problems and issues confronting all operations managers, (2) provide you with language, concepts, and insights which will help you to deal with these issues in order to gain competitive advantage through operations, and (3) further develop your ability to use analytical approaches and tools to understand and handle various managerial situations. Because the course deals with the management of "processes", it applies to both for-profit and non-profit organizations, to both service and manufacturing organizations, and to virtually any functional area or industry.

AS Foundational Abilities: Science and Data (FA2)

BU.667.315. Organizational Management. 3 Credits.

This course examines the factors that influence individual, group, and organizational behavior. Topics covered include social networks, organizational learning, power and influence, leadership, group behavior, decision-making, and organizational structure and culture.

AS Foundational Abilities: Science and Data (FA2), Ethics and Foundations (FA5)

EN Foundational Abilities: Engagement with Society (FA4)

BU.667.325. Scaling Startups: Ideation, Financing, and High-Growth Strategies. 3 Credits.

This course introduces students to the entrepreneurial process, with an emphasis on identifying high-growth opportunities, venture funding, and experiential experiences to begin to execute with support from university resources. Kick-started with insight from industry mentors about high-growth venture trends, the course will help students build the knowledge, skills, and analysis skills to detect and investigate entrepreneurial opportunities. The second part of the course will focus on the real-world tools needed to successfully evaluate and execute venture capital deals, and how to interact with venture capital firms as an entrepreneur. Throughout the course, students will engage in stakeholder discovery and ideation—and pitch their ideas, build foundational skills, and learn the resources available to support creating investible, scalable ventures.

AS Foundational Abilities: Writing and Communication (FA1)

EN Foundational Abilities: Engagement with Society (FA4)

BU.667.400. Business Capstone. 3 Credits.

This course is designed to serve as the last course taken as part of the business minor program. By integrating the knowledge and skills acquired from foundational courses in the business minor program, students will identify and diagnose the strategic issues that companies face in complex and competitive environments. Strategic Management encompasses a series of interrelated steps in which managers conduct analyses at the industry, business, and corporate levels; decide on strategies to enhance firm competitiveness; put those strategies into action; and constantly evaluate and modify those strategies as needed. This case-based course helps the students to develop skills in conducting industry analysis, identifying the firm's resources and capabilities, and addressing problems in strategy implementation. In the Business Capstone, students assume the role of the practicing general manager and develop a capacity to propose and implement sound, realistic, and specific solutions for the firm's strategic problems.

AS Foundational Abilities: Writing and Communication (FA1), Projects and Methods (FA6)