

# BMGT - BUSINESS AND MANAGEMENT

## **BMGT400 Data Visualization and Web Analytics (3 Credits)**

Data-driven decisions are increasingly embedded in business organizations. Business professionals must be able to explore and communicate data with understandable and powerful visualizations. This course provides an interactive introduction to data visualization and web analytics using industry standard data visualization tools, techniques, and frameworks to aid in business communication. Additionally, students will explore the use of data visualizations in understanding networks and web analytics.

**Prerequisite:** BMGT302.

**Credit Only Granted for:** BMGT400 or BMGT408V.

**Formerly:** BMGT408V.

## **BMGT401 Big Data and AI using Cloud Computing (3 Credits)**

Big data represents unprecedented opportunities for companies to generate insights and create wealth. Artificial intelligence (AI) has penetrated our daily routines, showing promise in many business areas such as finance, transportation, and healthcare. With cloud computing advances, big data and AI tools are more accessible and cost effective to average businesses; however, key challenges exist in initiating, implementing, and managing AI projects that analyze large, unstructured data. This course provides students with essential knowledge of key big data and AI technologies through hands-on, experiential learning using cloud computing platforms. Students will be able to help guide the successful design and implementation of complex data strategies.

**Prerequisite:** BMGT302.

**Credit Only Granted for:** BMGT401 or BMGT408E.

**Formerly:** BMGT408E.

## **BMGT402 Database Systems (3 Credits)**

The fundamentals of database management systems (DBMS), data models, query processing, and data warehouses, and their application in the development of business information systems will be covered. An important goal of this course is to understand the value of information resources and information management challenges within an organization.

**Recommended:** BMGT302.

**Credit Only Granted for:** INST327 or BMGT402.

## **BMGT403 Systems Analysis and Design (3 Credits)**

Techniques and tools applicable to the analysis and design of computer-based information systems. System life cycle, requirements analysis, logical design of databases and performance evaluation. Emphasis on case studies. Project required that involves the design, analysis and implementation of an information system.

**Prerequisite:** BMGT301; or students who have taken courses with comparable content may contact the department.

**Recommended:** BMGT302.

## **BMGT404 Essential Data Skills for Business Analytics (3 Credits)**

Building on prior programming knowledge, this course introduces principles of data science to collect, analyze, and visualize business data. Students will explore application of business analytics in areas such as finance, accounting, marketing, and operations. This course especially emphasizes learning by doing exercises using a modern, high-level programming language and industry standard software.

**Prerequisite:** BMGT302.

**Credit Only Granted for:** BMGT404 or CMSC320.

**Additional Information:** CMSC majors will not receive credit for this course towards their upper level concentration in their CMSC major.

## **BMGT406 Developing Applications for the Web and Social Media (3 Credits)**

The design and development of Web applications and the underlying platforms and standards for Web application development will be covered. It will examine the phenomenon of social media, social networking and crowdsourcing and understand their use within organizations.

**Prerequisite:** BMGT402 and BMGT302.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** INST377 or BMGT406.

## **BMGT407 Information Systems Projects (3 Credits)**

Senior capstone course for the information systems major. Collected knowledge from the IS courses and application to significant problems of size and complexity. State-of-the-art research ideas and current business and industrial practices in information systems.

**Prerequisite:** BMGT302, BMGT402 and BMGT403.

**Restriction:** Senior standing.

## **BMGT408 Emerging Topics in Information Systems (3 Credits)**

Selected advanced topics covering emerging developments in the field of decision and information technologies.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business.

**Repeatable to:** 9 credits if content differs.

## **BMGT410 Government Accounting (3 Credits)**

An introduction to the theory and practice of accounting and financial reporting as applied in both federal and state/local governments, with a focus on generally accepted accounting principles applicable in each. Topics include analyzing transactions; recognizing transactions in the accounting cycles; and preparing and analyzing financial statements and the overall financial reports at both the federal and state/local government levels.

**Prerequisite:** BMGT221.

## **BMGT411 Ethics and Professionalism in Accounting (3 Credits)**

Analysis and discussion of issues relating to ethics and professionalism in accounting.

**Prerequisite:** BMGT311.

**Restriction:** Must be in Accounting program.

## **BMGT417 Taxation of Corporations, Partnerships and Estates (3 Credits)**

Federal taxation of corporations using the life-cycle approach-formation, operation, assessment, merger, reorganization and liquidation. Overviews of pass-through entities - partnerships and s-corporations -using the life-cycle approach, and the tax consequences of wealth transfers by individuals - gift and estate taxation. Both tax planning and compliance issues are addressed.

**Prerequisite:** BMGT221.

**BMGT422 Auditing Theory and Practice (3 Credits)**

A study of the independent accountant's attest function, generally accepted auditing standards, compliance and substantive tests and report forms and opinions.

**Prerequisite:** BMGT310; and must have completed or be concurrently enrolled in BMGT311.

**BMGT423 Fraud Examination (3 Credits)**

The focus of this course in fraud accounting is on fraud prevention, detection, and investigation as relevant to accountants and fraud examiners. Most organizations are affected to some degree by the occurrence of fraud, whether or not reported. It is estimated that organizations, WORLDWIDE, lost roughly 5% of their annual revenues to fraud. Despite advances in technology, the problem of fraud continues to escalate; and in particular, cybercrime is growing at an alarming rate. The course will serve as an introduction to all of the topics covered in the Certified Fraud Examiner (CFE) examination. While not purporting to be an exam preparation course, the diligent student could be CFE exam ready soon after taking this course. This course provides an introduction to the profession of fraud examination for accounting majors or for individuals seeking to satisfy the educational requirements for the CPA examination.

**Prerequisite:** BMGT220 or BMGT210.

**BMGT424 Advanced Accounting (3 Credits)**

Advanced accounting theory applied to specialized topics and current problems. Emphasis on consolidated statements and partnership accounting.

**Prerequisite:** BMGT311.

**BMGT428 Special Topics in Accounting (3 Credits)**

Selected advanced topics in Accounting.

**Repeatable to:** 9 credits if content differs.

**BMGT430 Data Modeling in Business (3 Credits)**

Explores the role of statistical models in business analytics to drive managerial decision-making and improve performance through the use of relevant data-motivated examples. Topics include regression models (both simple and multiple regression, as well as logistic regression for binary data), model validation, variable transformation, variable selection, discriminant analysis, and forecasting. These topics are modeled using state-of-the-art data analytics software.

**Prerequisite:** BMGT231 or BMGT230; or permission of BMGT-Robert H. Smith School of Business.

**BMGT431 Data Analytics (3 Credits)**

An introduction to the tools and techniques that are central to the analysis of abundant data that is being collected in many forms including web traffic, social network data, and reviews and comments on websites.

**Prerequisite:** BMGT430.

**BMGT434 Analytics Consulting: Cases and Projects (3 Credits)**

This course assumes that students have already been introduced to the concepts and techniques of operations research/business analytics (OR/BA). Published papers, short cases, and projects in OR/BA will be analyzed and discussed in a thoughtful way, taking into account the soft (people-related) issues and the hard (mathematical/optimization) issues.

**Prerequisite:** BMGT332.

**BMGT435 Business Process Simulation (3 Credits)**

Covers the methods for computer simulation modeling and analysis of complex systems. Students are assumed to have been introduced to the basic techniques and applications in the field of operations management and business analytics. Course emphasis is on modeling of real-world systems (for example, inventory or queueing systems), implementing simulations in special purpose software, and analyzing simulation results.

**Prerequisite:** BMGT332.

**BMGT438 Special Topics in Operations Management (1-3 Credits)**

Selected advanced topics in operations management.

**Repeatable to:** 6 credits if content differs.

**BMGT440 Advanced Financial Management (3 Credits)**

Analysis and discussion of cases and readings relating to financial decisions of the firm. The application of finance concepts to the solution of financial problems is emphasized.

**Prerequisite:** BMGT340.

**BMGT441 Fixed Income (3 Credits)**

Describes important financial instruments which have market values that are sensitive to interest rate movements. Develops tools to analyze interest rate sensitivity and value fixed income securities. Defines and explains the vocabulary of the bond management business.

**Prerequisite:** BMGT340.

**BMGT442 Advanced Portfolio Management (3 Credits)**

An in-depth coverage of statistical methods for choosing stocks is provided. Financial markets data is used in the class. Students are also expected to learn and use an industry-standard programming language during the class to implement the concepts of the class.

**Prerequisite:** BMGT343 and BMGT347.

**BMGT443 Applied Equity Analysis and Portfolio Management (3 Credits)**

Study and application of the concepts, methods, models, and empirical findings to the analysis, valuation and selection of securities, especially common stock.

**Prerequisite:** BMGT343.

**BMGT444 Futures and Options Contracts (3 Credits)**

The institutional features and economic rationale underlying markets in futures and options. Hedging, speculation, structure of futures prices, interest rate futures, efficiency in futures markets and stock and commodity options.

**Prerequisite:** BMGT343.

**Credit Only Granted for:** BMGT444 or MATH424.

**BMGT445 Banking and Financial Institutions (3 Credits)**

Analysis and discussion of cases and readings in commercial bank management. The loan function is emphasized; also the management of liquidity reserves, investments for income and source of funds. Bank objectives, functions, policies, organization, structure, services and regulation are considered.

**Prerequisite:** BMGT340.

**Recommended:** ECON330 or BMGT341.

**BMGT446 International Finance (3 Credits)**

Financial management from the perspective of the multinational corporation. Topics covered include the organization and functions of foreign exchange and international capital markets, international capital budgeting, financing foreign trade and designing a global financing strategy. Emphasis of the course is on how to manage exchange and political risks while maximizing benefits from global opportunity sets faced by the firm.

**Prerequisite:** BMGT340.

**BMGT448 Special Topics in Finance (1-3 Credits)**

Selected advanced topics in finance.

**Repeatable to:** 9 credits if content differs.

**BMGT449 Investment Fund Management: Lemma Senbet Fund (3 Credits)**

The Lemma Senbet Fund is a year-long, advanced finance course available to undergraduate finance majors in their senior year. Ten to twelve students will be selected in the spring of their junior year to participate on the fund, two as portfolio managers and eight to ten as equity analysts. The course provides students with the opportunity to apply what they have learned in finance classes to actual investment decisions, through researching real companies and managing a portfolio of real money.

**Prerequisite:** BMGT343.

**Corequisite:** BMGT443.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business.

**Repeatable to:** 6 credits if content differs.

**BMGT450 Integrated Marketing Communications (3 Credits)**

In-depth study of coordinated marketing activities including advertising, sales promotion, Internet marketing, direct marketing and personal selling. Emphasizes strategic planning to effectively use these promotional tools to communicate with customers and meet marketing goals. Blends theory and current practice to provide managerial orientation.

**Prerequisite:** BMGT350.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**BMGT453 Retail Management (3 Credits)**

Planning and implementing retail marketing strategy. Application to store and non-store (catalog, internet) retailing. Evaluation of how environmental trends in the consumer market, competition, the economy and technology affect retail strategy in the U.S. and global market.

**Prerequisite:** BMGT220 and BMGT350.

**Credit Only Granted for:** BMGT353 or BMGT453.

**Formerly:** BMGT353.

**BMGT454 Global Marketing (3 Credits)**

Marketing functions from the global executive's viewpoint, including coverage of global marketing policies relating to product adaptation, data collection and analysis, channels of distribution, pricing, communications and cost analysis. Consideration is given to the cultural, legal, financial and organizational aspects of global marketing.

**Prerequisite:** BMGT350.

**BMGT455 Sales Management (3 Credits)**

The roles of the sales executive as a planner, manager of resources and marketing functions and recruiter, trainer, motivator and leader of field sales personnel. Techniques and sequence of problem analysis for selling and sales management decisions and to the practical framework in which these decisions take place. Teaching vehicles feature strong classroom interactions, cases, journal articles, research findings, guest sales managers, debates, and modern company practices.

**Prerequisite:** BMGT350.

**BMGT456 Customer-Centric Innovation (3 Credits)**

Addresses the management of new products and services with a focus on the innovation process, specifically the development and launching of new products or services: Opportunity Identification, Concept Generation, Design, Testing and Launch.

**Prerequisite:** BMGT350.

**Credit Only Granted for:** BMGT352, BMGT382 or BMGT456.

**Formerly:** BMGT352.

**BMGT457 Marketing Policies and Strategies (3 Credits)**

This capstone course ties together various marketing concepts using the fundamentals of strategic market planning as the framework. Application of these principles is accomplished by analyzing and discussing cases and by playing a marketing strategy computer simulation game. Analysis of current business articles to understand the link between theory and real-world problem solving.

**Prerequisite:** BMGT350.

**BMGT458 Special Topics in Marketing (1-3 Credits)**

Selected advanced topics in marketing.

**Repeatable to:** 6 credits if content differs.

**BMGT461 Entrepreneurship (3 Credits)**

Process of creating new ventures, including evaluating the entrepreneurial team, the opportunity and the financing requirements. Skills, concepts, mental attitudes and knowledge relevant for starting a new business.

**Restriction:** Must not have completed BMGT361.

**Credit Only Granted for:** BMGT261, BMGT361, BMGT461, ENES460, SMLP470 or HLMN470.

**BMGT463 Cross-cultural Challenges in Business (3 Credits)**

Examines in depth the nature of international cultural value-differences and their behavioral-related effects in the workplace. Topics include decision-making and leadership styles and reactions to various work assignments and reward structures.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**BMGT465 Business Plan For The New Venture (3 Credits)**

Each student focuses on the production of a business plan that will be accepted for an annual business plan competition. Business plans of sufficient quality may be submitted to attract financing. Topics include a deep review of business construction and its derivative short forms.

**Prerequisite:** BMGT461 or BMGT361.

**BMGT466 Global Business Strategy (3 Credits)**

Focuses on the strategic challenges that directly result from and are associated with the globalization of industries and companies. Topics include drivers of industry globalization, difference between global and multi-domestic industry, global expansion strategies, sources of competitive advantage in a global context, and coordination of a company across a global network.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**BMGT467 Strategic Innovation and Entrepreneurship (3 Credits)**

Provides an understanding of how innovation affects the competitive dynamics of markets, how firms can strategically manage innovation, and how firms can create and implement strategies to maximize their likelihood of success.

**Credit Only Granted for:** BMGT467, ENES463 or HLMN472.

**BMGT468 Special Topics in Management and Organization (1-3 Credits)**

Selected advanced topics in management and organization.

**Repeatable to:** 6 credits if content differs.

**BMGT469 Management and Organization Short-term Study Abroad (3 Credits)**

Selected short-term study abroad topics in management and organization.

**Repeatable to:** 9 credits if content differs.

**BMGT472 Purchasing and Inbound Logistics (3 Credits)**

Analysis of the resupply activities of logistics management, including purchasing policies, transportation planning, and inventory control. Attention is directed toward total cost minimization and the establishment of a sustainable competitive advantage based on procurement.

**Prerequisite:** BMGT372.

**BMGT475 Supply Chain Strategy and Network Design (3 Credits)**

Analysis of the strategic aspects of supply chain management. Emphasis on the creation of end-user value through supply chain cost reductions, service improvements or both. Attention is directed toward the enabling role of technology in support of strategy evaluation and implementation.

**Prerequisite:** BMGT372.

**BMGT476 Technology Applications in Supply Chain Management (3 Credits)**

An understanding of the role of technology in managing the supply chain. Provides students with hands-on experience in advanced software systems that build on top of enterprise resource planning systems. Major emphasis is placed on demonstrating that these systems result in supply chain cost reductions and service improvements.

**Prerequisite:** BMGT372.

**BMGT477 International Supply Chain Management (3 Credits)**

The study of the importance of the supply chain management within a global context. Topics covered include: the structure, service, pricing and competitive relationships among international carriers and transport intermediaries as well as documentation, location decisions, international sourcing/distribution and management of inventory throughout the international supply chain.

**BMGT478 Special Topics in Supply Chain Management (3 Credits)**

Selected advanced topics in supply chain management.

**Repeatable to:** 9 credits if content differs.

**Additional Information:** Course prerequisites will vary depending on the topic. A maximum of 3 credits of BMGT478 course work can fulfill Supply Chain Management major requirements.

**BMGT483 Sports Management Program Capstone (3 Credits)**

Through interdisciplinary collaboration, students will work in teams to apply their knowledge and skills in sports management to a real-world case. Student teams will be charged to develop innovative and creative solutions to sports management challenges while considering the ethical implications of their proposals.

**Prerequisite:** BMGT383.

**BMGT484 Digital Marketing (3 Credits)**

Examines the process of developing, implementing, and analyzing strategies for successfully marketing a variety of existing and potential products and services through digital means, including the web, social media, and mobile apps. Both the development and analysis of digital media for marketing will be discussed.

**Prerequisite:** BMGT350.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**BMGT485 Project Management (3 Credits)**

Modern project management techniques that are used by modern practicing professionals will be covered. Particular attention is given to the management of technology based systems and projects in a business enterprise. The topics covered include: defining project scope, alignment of projects with enterprise strategy, managing project cost, time and risks using tools such as CPM/PERT, and measuring project performance.

**Prerequisite:** BMGT231 or BMGT230; or students who have taken courses with comparable content may contact the department.

**Restriction:** Must be in a major in BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BMGT485, ENCE320, ENCE325, INST4080 or INST453.

**BMGT487 Six Sigma Innovation (3 Credits)**

Enhances the overall understanding of Six Sigma Strategy, Tools and Methods to positively influence the performance of a business process, a product or service. Highlights the application of Define-Measure-Analyze-Improve-Control (DMAIC), Design For Six Sigma (DFSS), and the pursuit of Critical to Quality criteria (CTQ's) in a collaborative perspective, one that recognizes a balance between efficiency, and effectiveness and between statistical analysis and statistical thinking.

**Prerequisite:** STAT400, BMGT231, BMGT230, or ENME392.

**BMGT488 Special Topics in Logistics, Business, and Public Policy (1-3 Credits)**

Selected advanced topics in logistics, business and public policy.

**Repeatable to:** 6 credits if content differs.

**BMGT490 QUEST Capstone Professional Practicum (4 Credits)**

The capstone course for the QUEST Honors Program provides students with an opportunity to learn in multidisciplinary teams of business, engineering, and science students in a real-world setting. Companies engage teams of QUEST students with real organizational challenges and dedicate resources to help students address these problems. Student teams must enhance their skills in quality management, process improvement, and systems design and will apply these to add value to a client. In the process, students will improve their teamwork skills.

**Prerequisite:** BMGT390, ENES390 or ENED390.

**Cross-listed with:** ENED490.

**Credit Only Granted for:** BMGT490, ENES490 or ENED490.

**Formerly:** ENES490.

**BMGT491 Scoping Experiential Learning Projects (3 Credits)**

QUEST students cultivate relationships with new and current corporate partners and prepare project scopes for QUEST's introductory course, BMGT/ENES 190H, and capstone course, BMGT/ENES 490H. Requires independent work communicating with clients and class visits to a variety of potential project sites.

**Prerequisite:** BMGT190 or ENES190.

**Cross-listed with:** ENES491.

**Restriction:** Restricted to QUEST Program (TQMP) students.

**Credit Only Granted for:** BMGT491 or ENES491.

**BMGT493 Honors Study (3 Credits)**

First semester of the senior year. The course is designed for honors students who have elected to conduct intensive study (independent or group). The student will work under the direct guidance of a faculty advisor and the Assistant Dean of Undergraduate Studies. They shall determine that the area of study is of a scope and intensity deserving of a candidate's attention. Formal written and/or oral reports on the study may be required by the faculty advisor.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business.



**BMGT494 Honors Study (3 Credits)**

Second semester of the senior year. The student shall continue and complete the research initiated in BMGT 493, additional reports may be required at the discretion of the faculty advisor and Assistant Dean of Undergraduate Studies.

**Prerequisite:** BMGT493.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; and must be in the Smith School Honors Fellows program.

**BMGT495 Strategic Management (3 Credits)**

A case-based course where students learn to play the role of the "strategic manager" who defines the scope of its business operations and, within the chosen scope, how the firm will compete against rivals. This course focuses on how a firm can both formulate effective business-level and corporate-level strategies to achieve competitive advantage and earn above average profits.

**BMGT496 Business Ethics and Society (3 Credits)**

A study of the standards of business conduct, morals and values as well as the role of business in society with consideration of the sometimes conflicting interests of and claims on the firm and its objectives. Emphasizes a strategic approach by business to the management of its external environment.

**Prerequisite:** 1 course in BMGT; or permission of BMGT-Robert H. Smith School of Business.

**BMGT498 Special Topics in Business and Management (3 Credits)**

Special topics in business and management designed to meet the changing needs and interests of students and faculty.

**Repeatable to:** 6 credits if content differs.

**BMGT499 Advanced Business Topics (1 Credit)**

Course will delve deeply into a specific business topic. Based on experience and knowledge from undergraduate core business classes, students will examine a particular subject from various angles.

**Repeatable to:** 3 credits if content differs.

**BMGT600 Leadership and Teamwork (2 Credits)**

Course examines concepts of team-building and leadership which are critical to managerial success. Topics include leadership, decision making, communication and conflict, work motivation, building effective teams, and organizational change and culture.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BMGT600, BUSI662 or BUSM600.

**BMGT602 Introduction to Financial Accounting (2 Credits)**

Overview of financial accounting, periodic financial statements and the financial reporting process. Importance of financial statements as information source for creditors and investors and as a means by which managers can communicate information about their firms.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI610, BUAC602, BUFN602, or BMGT602.

**BMGT604 Managerial Economics and Public Policy (2 Credits)**

Basic microeconomic principles used by firms, including supply and demand, elasticities, costs, productivity, pricing, market structure and competitive implications of alternative market structures. Market failures and government intervention. Public policy processes affecting business operations.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BUSI681 or BMGT604.

**BMGT606 Data Driven Decision Making (2 Credits)**

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

**Restriction:** Must be in one of the following programs (Business and Management (Master's); Business and Management (Master's)) ; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI630 or BMGT606.

**BMGT610 Financial Management (2 Credits)**

Focuses on the valuation of the real assets of firms as well as the valuation of stocks and bonds, the primary financial assets in an economy. While details vary, the conceptual foundations of valuation boil down to three themes: time value of money, no-arbitrage, and systematic risk.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BUSI640, BUFN610, or BMGT610.

**BMGT612 Marketing Management (2 Credits)**

Analysis of marketing problems and evaluation of specific marketing efforts regarding the organization's products and services, pricing activities, channel selection, and promotion strategies in both domestic and international markets.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BUSI650 or BMGT612.

**BMGT614 Strategic Management (2 Credits)**

Analyze and identify profit opportunities and threats in different industry and competitive environments; Analyze and identify a firm's valuable assets, resources and capabilities and how they might be protected, leveraged, and extended in the market; Learn how to organize your company to be the best prepared to adapt its strategy over time as the market environment changes; and how to use organic growth as well as mergers, acquisitions, joint ventures, alliances, and divestitures to ensure that the firm maintains the proper scale and scope to compete effectively over time.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BUSI690 or BMGT614.

**BMGT616 Managerial Accounting (2 Credits)**

Use of accounting data in corporate planning and control. Cost-volume-profit analysis, budgeting, pricing decisions and cost data, transfer pricing, activity-based management, performance measures, and standard costing.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI611, BUSI616, or BMGT616.

**BMGT620 Business Communication (2 Credits)**

Develop the ability to communicate with and about data.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI758A or BMGT620.

**BMGT624 Operations Management (2 Credits)**

Operations management is concerned with efficient and effective design and operation of business processes for delivering products and/or services. Emphasis is given to process analysis and design, capacity management and bottlenecks, waiting lines and the impact of uncertainty in process performance, quality management, lean, six-sigma, and revenue management.

**Restriction:** Permission of BMGT-Robert H. Smith School of Business; or must be in Business and Management (Master's) program.

**Credit Only Granted for:** BUSI634 or BMGT624.

**BMGT630 Data Models and Decisions (3 Credits)**

To develop probabilistic and statistical concepts, methods and models through examples motivated by real-life data from business and to stress the role that statistics plays in the managerial decision making process.

**BMGT640 Financial Management (3 Credits)**

Analysis of major corporate financial decisions using a market-oriented framework. Introduction to value techniques, capital budgeting principles and problems, asset valuation, operation and efficiency of financial markets, financing decisions, dividend policy and international finance. Additional topics, such as mergers and acquisitions may be covered.

**BMGT700 Competitive and Collaborative Negotiation (2 Credits)**

Increase negotiating self-confidence and improve capacity to achieve win-win solutions to organizational problems. Improve effectiveness at finding creative solutions to conflict.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUM0714 or BMGT700.

**BMGT708 Special Topics in Cybersecurity (3 Credits)**

Special Topics in Cybersecurity

**Repeatable to:** 9 credits if content differs.

**BMGT710 Global Strategy (2 Credits)**

Focuses on the "strategic" and "organizational" questions that a company must address as it globalizes its footprint. Among the questions that will be addressed are: What are the potential benefits, costs, and risks associated with going abroad? What differentiates a "global" from a "multidomestic" industry? What are the sources of competitive advantage in a global context?

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI674, BUM0754, or BMGT710.

**BMGT720 Innovation & Product Development (2 Credits)**

This course focuses on the development of innovations - new products or new services - from the perspective of a marketer. For an innovation to be successful in the market, it has to be customer-centric: hence, in this course, we study how to develop and bring to market elegant and efficient solutions to strong customer needs. This is a fundamental business challenge, faced while working in a startup or in an established company; when developing a new product or a new service; and when serving customers who are individuals or large corporations.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUMK758P or BMGT720.

**BMGT730 Valuation in Corporate Finance (2 Credits)**

An advanced topics course in Corporate Finance dealing with valuation. Main topics will be, building pro forma statements, cost of capital, using ratios and comparables to value projects and firms, discounted cash flow valuations, WACC and APV methods of valuation and Real Option Valuations.

**Prerequisite:** BMGT600.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUFN630, BUFN714, BUFN750, BUFN753, or BMGT730.

**BMGT740 Global Supply Chain Management (2 Credits)**

Offers a practical blueprint for understanding, building, implementing, and sustaining supply chains in today's rapidly changing global supply chain environment. It will provide the student with a survey of the fast-moving Supply Chain Management discipline and practice, including the evolution of supply chain strategies, business models and technologies; current best practices in demand and supply management; and methodologies for conducting supply chain-wide diagnostic assessments and formulating process improvement plans.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Credit Only Granted for:** BUSI672 or BMGT740.

**BMGT758 Special Topics in Business and Management (1-4 Credits)**

Selected advanced topics in the various fields of graduate study in business.

**Prerequisite:** Permission of BMGT-Robert H. Smith School of Business.

**Restriction:** Must be in Business and Management (Master's) program; or permission of BMGT-Robert H. Smith School of Business.

**Repeatable to:** 9 credits if content differs.

**BMGT788 Mastery Topic for EMBA (2 Credits)**

Selected mastery topics which will cover various aspects of executive education.

**Restriction:** Must be in Executive MBA program.

**Repeatable to:** 8 credits if content differs.

**BMGT789 Action Learning Project (3-4 Credits)**

Significant consulting project, team designed by individual EMBA student participants and faculty.

**Restriction:** Must be in Executive MBA program.

**Repeatable to:** 10 credits if content differs.

**BMGT808 Special Topics in Information Systems (1-9 Credits)**

Special topics specific to the Information Systems doctoral field of study.

**Prerequisite:** Permission of BMGT-Robert H. Smith School of Business.

**Repeatable to:** 18 credits if content differs.

**BMGT811 Seminar in Financial Accounting (3 Credits)**

Seminar in selected classic and current theoretical and empirical research in financial accounting.

**BMGT818 Special Topics in Accounting and Information Assurance (1-9 Credits)**

Special topics specific to the Accounting and Information Assurance doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT821 Seminar in Management Accounting (3 Credits)**

Design and use of accounting information systems for managerial planning and controllership.

**BMGT828 Independent Study in Business and Management (1-9 Credits)****BMGT830 Operations Research: Linear Programming (3 Credits)**

Concepts and applications of linear programming models, theoretical development of the simplex algorithm, and primal-dual problems and theory.

**Prerequisite:** MATH240; or students who have taken courses with comparable content may contact the department; or permission of BMGT-Robert H. Smith School of Business.

**BMGT831 Operations Research: Extension of Linear Programming and Network Analysis (3 Credits)**

Concepts and applications of network and graph theory in linear and combinatorial models with emphasis on computational algorithms.

**Prerequisite:** BMGT830; or students who have taken courses with comparable content may contact the department; or permission of BMGT-Robert H. Smith School of Business.

**BMGT833 Operations Research: Integer Programming (3 Credits)**

Theory, applications, and computational methods of integer optimization. Zero-one implicit enumeration, branch and bound methods, and cutting plane methods.

**Prerequisite:** BMGT830; and (MATH241; or students who have taken courses with comparable content may contact the department). Or permission of BMGT-Robert H. Smith School of Business.

**BMGT834 Operations Research: Probabilistic Models (3 Credits)**

Theoretical foundations for the construction, optimization, and applications of probabilistic models. Queueing theory, inventory theory, Markov processes, renewal theory, and stochastic linear programming.

**Prerequisite:** MATH241; and (STAT400; or students who have taken courses with comparable content may contact the department). Or permission of BMGT-Robert H. Smith School of Business.

**BMGT835 Simulation of Discrete-Event Systems (3 Credits)**

Simulation modeling and analysis of stochastic discrete-event systems such as manufacturing systems, inventory control systems, and computer/ communications networks.

**Prerequisite:** Knowledge of Fortran, Basic, C, or Pascal.

**BMGT836 Applied Regression Models (3 Credits)**

An introduction to regression models used in business research. Topics include: simple and multiple regression, diagnostics for checking model adequacy, transformations, polynomial models, indicator variables, multicollinearity, variable selection, times series data, generalized linear models, implementation using statistical software, and application to research questions.

**Recommended:** It is assumed that the student has taken a first course in statistics and is familiar with the content of such course including interval estimation and hypothesis testing.

**BMGT837 Applied Multivariate Analysis (3 Credits)**

Multivariate statistical methods and their use in empirical research. Topics include: summarization and visualization of multivariate data, the multivariate normal distribution, tests on mean vectors, multivariate paired comparisons, multivariate analysis of variance, repeated measures designs, test on covariance matrices, discriminant analysis and classification, canonical correlation, principal components, factor analysis and cluster analysis. Maximum likelihood estimation and the likelihood ratio method of test construction.

**Recommended:** BMGT836 or equivalent course. BMGT837 assumes working knowledge of matrices and elementary linear algebra and a sound understanding of univariate statistics, including random variables, statistical inference, ANOVA, and ordinary least squares regression.

**BMGT838 Special Topics in Operations Management/Management Science (1-9 Credits)**

Special topics specific to the Operations Management/Management Science doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT840 Seminar in Financial Theory (3 Credits)**

Seminar in selected classic and current theoretical and empirical research in the foundations of finance.

**Prerequisite:** Permission of BMGT-Robert H. Smith School of Business.

**BMGT841 Seminar in Corporate Finance (3 Credits)**

Seminar in selected classic and current theoretical and empirical research in corporate finance.

**Prerequisite:** Permission of BMGT-Robert H. Smith School of Business.

**BMGT843 Seminar in Portfolio Theory (3 Credits)**

Seminar in selected classic and current theoretical and empirical research in portfolio theory.

**Prerequisite:** Permission of BMGT-Robert H. Smith School of Business.

**BMGT848 Special Topics in Finance (1-9 Credits)**

Special topics specific to the Finance doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT858 Special Topics in Marketing (1-9 Credits)**

Special topics specific to the Marketing doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT868 Special Topics in Organizational Behavior/Human Resource Management (1-9 Credits)**

Special topics specific to the Organizational Behavior/Human Resource Management doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT878 Special Topics in Strategic Management and Entrepreneurship (1-9 Credits)**

Special topics specific to the Strategic Management and Entrepreneurship doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT887 Bayesian Inference and Decision Theory (3 Credits)**

Bayesian Methodologies in statistical inference and decision theory.

Includes discussion of subjective probability and coherence, elicitation of distributions conjugate distributions, estimation, testing, preposterior analysis and regression analysis. Applications are drawn from the functional business areas.

**BMGT888 Special Topics in Supply Chain Management (1-9 Credits)**

Special topics specific to the Supply Chain Management doctoral field of study.

**Repeatable to:** 18 credits if content differs.

**BMGT898 Pre-Candidacy Research (1-8 Credits)****BMGT899 Doctoral Dissertation Research (1-8 Credits)**