



# Course Catalog

2019 – 2020

Build for What's Next™



## COURSE DESCRIPTIONS

The following courses are scheduled to be offered during the 2019-20 academic year. Updates to the course information contained herein may take place before the course is offered.

Course	Title	Description	Prerequisite(s)	
<b>BU.001.351</b>				
	Professional Development for Career Success	This experiential course is designed to help first-year GMBA students develop the skills needed to accomplish their personal and professional goals. Active participation is essential so that students develop these skills in sequence and receive feedback from instructors and peers. Students are expected to interact and engage with career coaches, external speakers, alumni, and employers throughout the course.	No Prerequisite(s)	
		Credits: 0.00		
<b>BU.001.510</b>				
	Career and Life Design for Experienced Professionals	Career and Life Design for Experienced Professionals provides you with an opportunity to learn and develop the necessary skills to engage in career planning. From deciding on occupations, and learning about resumes, to interviewing and job search strategies, this hands-on and exploratory eight-week course will help you understand, tell, and live your career story.	No Prerequisite(s)	
		Credits: 0.00		
<b>BU.001.600</b>				
	Graduate Internship Project	Internship projects are available for students needing transcript documentation of an approved Carey Business School Internship. The Internship Project course is an audit only, no credit course offered during each semester. Carey Business School students must be enrolled in a degree program at least one semester (9 credits) before seeking an internship. Students should apply and register for the internship project course at least two weeks before the internship begins.	No Prerequisite(s)	
		Credits: 0.00		
<b>BU.001.611</b>				

	Business English for Graduates I	This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. This course is the prerequisite for Business English for Graduates II. It meets for 3 hours a week for eight weeks.	No Prerequisite(s)
		Credits: 0.00	
<b>BU.001.612</b>			
	Business English for Graduates II	This course is a continuation of Business English for Graduates I. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for eight weeks.	BU.001.611
		Credits: 0.00	
<b>BU.001.614</b>			
	Business English for Graduates III	This course is a continuation of Business English for Graduates II. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for eight weeks.	BU.001.611 and BU.001.612
		Credits: 0.00	
<b>BU.001.615</b>			
	Business English for Graduates IV	This course is the continuation of Business English for Graduates III. This course is designed to polish students' communicative competence for academic and professional success through analysis of texts, discussion, in-class writing, group work, and reflection activities. It meets for 3 hours a week for eight weeks.	BU.001.611 and BU.001.612 and BU.001.614
		Credits: 0.00	
<b>BU.001.620</b>			
	Summer Intensive	The Summer Intensive aims to prepare international students entering the Johns Hopkins Carey Business School full-time graduate programs for the academic rigors of one of the world's premier universities.	No Prerequisite(s)

		<p>The program focuses on helping participants adjust to American life and culture. Daily practice in writing and speaking English in a variety of contexts helps students prepare for the logistical, academic, professional, and social challenges they will face. Through close reading of articles and case studies, they learn and apply essential business concepts and terminology from such core disciplines as economics, accounting, organizational behavior, and marketing. In addition, participants are introduced to resources and strategies to cope with the logistics of living in a foreign country, from housing and transportation to grocery shopping and navigating a telephone book. One function of such a carefully orchestrated transition is to reduce the anxiety and stress usually associated with the start of classes.</p>		
		Credits: 0.00		
<b>BU.001.700</b>				
	Independent Graduate Project	<p>An independent study provides an opportunity for students to study a particular topic of interest in depth. Students who demonstrated competency in a certain area may elect to pursue an independent study project under the supervision of a faculty sponsor with expertise in the selected area.</p>	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.003.893</b>				
	Leadership Development Expedition	<p>This course is a leadership-intensive seminar and expedition focused on helping students develop their own leadership capacity, while also emphasizing a conceptual understanding of leadership in diverse settings. The course utilizes the unique opportunity for leadership development embedded in outdoor experiential education, providing students the challenge of serving as a leader. The course combines a thorough academic introduction to leadership development and opportunity for self-assessment with repeated reflection and feedback to help students develop their own path as leaders.</p> <p>This is a physically demanding course. Students should be in moderate physical condition. However, no technical outdoor skill or experience required - this is beginner friendly.</p> <p>Expedition destination, activities, physical demands, fees, and eligibility requirements vary.</p>	No Prerequisite(s)	

		Credits: 2.00		
<b>BU.003.903</b>				
	Global Immersion: Peru: Examining Peruvian Business Perspectives, Challenges, and Opportunities in the Context of Evolving International Trade Policies	This course aims to develop in-depth knowledge of current resets and negotiations in international trade policy and business implications through a partnership with the CENTRUM (Catolica Pontifica Universidad Catolica del Peru). Both Carey Business School faculty and CENTRUM professors will provide classes on the history and current status of the international trade approach and strategy in Peru and compare those to changes to the U.S. trade policy. Corporate and government organization visits will complement lectures and case studies to assess how businesses are adjusting to changing trade landscapes.	No Prerequisite(s)	
	Global Immersion: Finance in Europe	This course is offered to Carey Business School students interested in learning more about European financial markets. The course takes place in Frankfurt, Germany, and London, England. It aims to develop in-depth knowledge of the European financial system through a partnership with the Frankfurt School of Finance and Management (FSFM). Both Carey Business school faculty and FSFM professors will provide classes on the history and current status of the financial system in Europe and compare those systems to the U.S. financial landscape. Corporate and government organization visits will complement lectures and case studies.	No prerequisite(s)	
		Credits: 2.00 (each course)		
<b>BU.009.001</b>				
	Directed Research	This course is reserved for non-degree students in visiting research positions.	No Prerequisite(s)	
		Credits: 9.00		

<b>BU.120.601</b>				
	Business Communication	This course refines students' skills in business writing, public speaking, and interpersonal communication. Through analyses and practice of communication strategies adopted by successful business professionals, students learn to write clearly and concisely, deliver compelling presentations, and construct effective arguments.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.121.610</b>				
	Negotiation	This course provides students with the foundational knowledge and skills needed to negotiate. Designed around a series of research-based negotiation exercises, the course exposes students to a variety of negotiation situations that help them to understand two fundamental approaches to negotiation. By reflecting on these exercises in light of negotiation theory, students develop an awareness of their personal negotiation style, including its strengths and weaknesses. By the end of the course, students will be able to negotiate in an effective, ethical, and culturally appropriate manner.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.131.601</b>				
	Business Leadership and Human Values	This foundational course develops students' capacities for understanding themselves as moral agents in a complex environment of competing values and often ambiguous ethical challenges inherent in business. Through a rigorously discursive exploration of human moral capabilities, value systems, ethical frameworks, and contemporary ethical dilemmas, students clarify their personal moral compass and develop a toolkit of knowledge and practices for sound ethical leadership in business and society.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.132.601</b>				

	Business Law	A thorough working knowledge of the legal and regulatory environment in which businesses operate is essential for well-prepared business executives. This course provides an overview of the legal and regulatory environment affecting business in the United States. Topics include forms of business organization, contracts, torts and product liability, intellectual property, constitutional law business transactions, and discrimination and employment issues. Students are expected to utilize electronic library and Internet resources to complete assignments.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.132.615</b>				
	Real Estate Legal Environment	Complex legal issues involved in a real estate development and management transaction are reviewed and analyzed in this course. Students explore legal topics, beginning with the basic principles of property law and extending to zoning and comprehensive planning, environmental issues and safeguards of site acquisitions through construction, including leasing, conflict resolution, operation, and sale of a real estate project. Negotiation, legal aspects of entity structures and resolving disputes are discussed.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.141.710</b>				
	Effective Teaming	In today's businesses, teams are a basic organizational building block. Teaming is perennially listed as one of the top skills that recruiters look for in graduating MBAs. This course conveys knowledge and practical tools that help students become more productive team members and leaders. Topics include the characteristics of high performing teams, leadership strategies for creating performing teams, strategies for avoiding dysfunctional	No Prerequisite(s)	

		team dynamics, and best practices for managing diverse and virtual teams.		
		Credits: 2.00		
<b>BU.142.620</b>				
	Leadership in Organizations	The goal of Leadership in Organizations is to help students learn how to leverage organizational behavior to enhance their ability to lead. Specifically, this course seeks to provide students with both the analytical frameworks and the practical experience necessary to better lead individuals and groups in organizations. The analytical frameworks will help students to understand leadership; the practical experience will help students put that understanding into action. The aim is to help students lead, even if they do not currently find themselves in a formal leadership role. The practices that are discussed will promote effectiveness at any level.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.142.720</b>				

	Managing in a Diverse & Global World	Business organizations and other critical organizations operate in both a market and nonmarket environment. A major focus of the course is examining contextually global diversity, inclusion, and multicultural issues through the lens of multiple dimensions. Successful, globally minded managers align the firm's capabilities with the demands of both its market and nonmarket environment. This course examines political, regulatory and societal factors of influence. Students learn to analyze the motives for focused intervention to better judge when and how political developments may affect business or organization interest. It explores the rise of "private politics" (activists, civil society networks, and NGOs), which are increasingly complementing conventional "public politics." This new plurality also opens exciting new nonmarket strategic opportunities for profit and socially driven business, providing it with new potential allies. This course stresses collective moral agency and the ethical dimensions of business and management in such a global political economy. Students explore cross-cultural perspectives on economics and business culture, and how to analyze and proactively manage the nonmarket environment through integrated market and nonmarket strategies. Cumulatively through class interaction and team activities students develop strategies for managing aspects of global diversity and inclusion within the context of a real organization opportunity.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.142.730</b>			
	Strategic Human Capital	Developing and managing human capital is vital for the success of any organization. In this course, students will examine ways in which human resources management can be used to enhance organizations' competitive capabilities. The goal will be to understand how an organization can select, train, and retain the right employees, and how it can effectively motivate them to make decisions that will allow the organization to successfully implement its overall strategy. Students will explore and master topics such as hiring and layoff decisions; human capital and on-the-job training; turnover; the provision of incentives; the advantages and disadvantages of alternative compensation schemes; objective and subjective performance evaluation; relative performance evaluation; promotions and other career-based incentive schemes; team production and team incentives; stock options and executive	No Prerequisite(s)

		compensation; intrinsic and extrinsic motivation; non-monetary compensation; and mandated benefits.		
		Credits: 2.00		
<b>BU.150.710</b>				
	Discovery to Market I	This course teaches the process of bringing scientific discoveries to market. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage inventions to third parties for further development. Students work in small teams on early-stage invention projects that are patented or patent pending sourced by the instructor from university and government technology transfer offices. Students will analyze the feasibility of commercializing the invention so that it can be licensed to a third party that can pursue entrepreneurial funding and development.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.150.715</b>				
	Discovery to Market II	This course is the second part of a two part course. This course teaches the process of bringing scientific discoveries to market. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage inventions to third parties for further development. Students work in small teams on early-stage invention projects that are patented or patent pending sourced by the instructor from university and government technology transfer offices. Students will analyze the feasibility of commercializing the invention so that it can be licensed to a third party that can pursue entrepreneurial funding and development.	BU.150.710	

		Credits: 2.00		
<b>BU.151.620</b>				
	Global Strategy	This course provides students with the conceptual tools necessary to understand and work effectively in today's interconnected world by developing strategic perspectives that link this changing environment, the state of the global industry, and the capabilities and position of the firm. The course provides frameworks for identifying and taking advantage of the opportunities presented in a dynamic global environment at the level of the country and industry. It then focuses on firm-level strategic choices regarding where to engage in which activities. Finally, it covers the challenges of integrating the multiple perspectives, functions, and interests that constitute the multinational firm.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.151.720</b>				
	Corporate Strategy	This course is concerned with the formulation and analysis of corporate strategy. Corporate strategy asks the question, 'In what industries should a firm compete?' These are the objectives and policies that collectively determine how a business positions itself to increase its returns and create economic value for its owners and stakeholders. In this course, students learn analytical techniques for diagnosing the industrial landscape of a business, a firm's overall portfolio, and identifying and analyzing specific business options. These concepts and frameworks will help you to learn to put structure on complex and unstructured problems in corporate strategy to provide a solid foundation for managerial decision making.	No Prerequisite(s)	

		Credits: 2.00		
<b>BU.151.770</b>				
	Power and Politics	The purpose of this course is to immerse you in issues and dynamics related to power and politics in organizations. We seek to make power and politics discussable, recognizable, and usable. In other words, this course is designed to fuel learning of concepts that are useful for understanding, analyzing, and harnessing power and political processes. But beyond discovering ways to extend your own power, influence, and political skill, we will also uncover lessons about ways in which power and politics can blind and deceive you, and how you might better navigate situations in which you are up against relatively more powerful people or forces. We will use a range of learning methods including theoretical and business articles, cases, exercises, assessments, and simulations. We will cover a variety of topics ranging from political skills, bases of power and influence, dangers of power, power and change, and leading with power.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.152.710</b>				
	Entrepreneurial Ventures	This course focuses on the knowledge, skills, and attitudes that enable entrepreneurs to pursue opportunities in business development. Students form teams to experience each step of the entrepreneurial process. The end result is an opportunity assessment of a business idea. Emphasis is placed on a hands-on approach with learning supplemented by cases appropriate to each phase of the course. Students are exposed to real entrepreneurial operations and businesses, via final project and presentations.	BU.210.620 and BU.410.620	
		Credits: 2.00		

<b>BU.152.725</b>				
	Real Estate Entrepreneurship	The real estate industry is made up of real estate entrepreneurs. This class examines how to become a real estate entrepreneur and compete in today's marketplace. Course topics focus on the skills and knowledge real estate entrepreneurs successfully use to thrive. Students will learn techniques such as: how to create wealth, real estate pro-formas, back-of-the-envelope calculations, leverage, attracting external investors, and creating a winning business plan. Students will work in teams on case studies.	BU.241.610 or BU.231.620	
		Credits: 2.00		
<b>BU.152.735</b>				
	Strategy Consulting Practicum	This course is concerned with the formulation and analysis and practical application of business strategy. Business strategy is the set of objectives and policies that collectively determine how a business creates value for stakeholders. Strategy is concerned with answering two central questions: "What businesses should we participate in?" and "How should we compete?" Students will learn analytical techniques for diagnosing the competitive position of a business, evaluate strategies, and identify and analyze strategic options.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.152.740</b>				
	CityLab Toolkit: Business Innovation for Social Impact	For the first time in history, humans are an urban species; the livability of cities now determines the future of humanity and the planet. CityLab is an urban innovation platform engaging students in a global experiment of reinventing cities by revitalizing urban neighborhoods from within. The CityLab Toolkit immerses you in the concrete context of people and places dealing with the disruptive uncertainty and frustration of livability challenges that threaten the environment, human health, social cohesion, civic order, and prosperity of cities. It introduces strategies, tools, and practices for tackling these challenges as opportunities to co-create value for the flourishing of humanity and the planet. This course is a hands-on, active learning experience requiring a high degree of individual commitment, initiative, self-discipline, adaptability, and collaboration. PREREQUISITES: This course is open to graduate students throughout the University who have completed at least four courses of their graduate program prior to enrolling.	See Course Description.	
		Credits: 2.00		
<b>BU.152.745</b>				
	City Lab Practicum: Social Impact Project	The CityLab Practicum puts the CityLab Toolkit knowledge and skills to work on a social impact project sponsored by a neighborhood entrepreneur, business, or organization. The Practicum is an opportunity to solidify your skills, demonstrate your expertise, deepen your network, and position yourself as an innovative social impact leader. This course is a hands-on, active learning experience requiring a high degree of individual	BU.152.740	

		commitment, initiative, self-discipline, adaptability, and collaboration.		
		Credits: 2.00		
<b>BU.210.001</b>				
	Accounting and Financial Reporting Waiver Exam	This exam affords students the opportunity to confirm proficiency in Accounting and Financial Reporting. Students who successfully complete the waiver exam will be granted a waiver with replacement for BU.210.620.	No Prerequisite(s)	
		Please note: Waiver exams may only be taken once per student, in the first or second semester of registration in a new program. The exam will be completed online in Blackboard within the timeframe stipulated listed within this course description. Students will be required to use Remote Proctor for the actual completion of the exam.		
		Credits: 0.00		
<b>BU.210.620</b>				
	Accounting and Financial Reporting	This course emphasizes the vocabulary, methods, and processes by which business transactions are communicated. Topics include the accounting cycle; basic business transactions involving assets, liabilities, equity, revenues, and expenses; as well as preparation and understanding of financial statements, including balance sheets, statements of income, and cash flows.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.210.650</b>				
	Advanced Financial Accounting	Advanced Financial Accounting is designed to prepare you to analyze, interpret, and use financial statements effectively, both from a general manager and from an investor perspective. The course will review and extend the topics introduced in Accounting and Financial Reporting with an emphasis on value creation. Specifically, the course will introduce a thorough framework for financial statement analysis, including advanced financial (ratio and cash flow) analysis, financial statement adjustments, and financial forecasting.	BU.210.620 or BU.910.611	
		Credits: 2.00		

<b>BU.210.680</b>				
	Cost Measurement and Control	This course emphasizes the vocabulary, methods, and processes by which managerial accounting concepts and cost management practices are applied across organizations to improve operational performance and achieve strategic goals. Topics include cost behavior, profit planning, product costing, overhead allocation, cost estimation, costing systems for short-term and long-term decision-making, capital budgeting, variance analysis, responsibility accounting, and performance measurement.	BU.210.620 or BU.910.610	
		Credits: 2.00		
<b>BU.220.610</b>				
	The Firm and the Macroeconomy	This course explores the workings of an economy from a macroeconomic perspective. Although the course focuses primarily on the United States economy and its relation with the rest of the world, the concepts and tools apply to market economies around the world. Major topics include: the determinants of an economy's output and price level in the long run; money and banks in the long run and short run; the role of interest rates and exchange rates in the U.S. economy and in small, open economies; the causes and nature of the business cycle and inflation; the role of fiscal and monetary policy in stabilizing the economy and ensuring full employment and price stability.	BU.220.620	
		Credits: 2.00		
<b>BU.220.620</b>				
	Economics for Decision Making	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.	BU.510.601 or BU.914.610	
		Credits: 2.00		

<b>BU.220.720</b>				
	Financial Econometrics	Financial econometrics is the intersection of statistical techniques and finance. It provides a set of empirical tools to analyze historical financial data, model underlying economic mechanisms, and predict future price trends. This course covers both cross-sectional and time-series data. Multivariate regression analysis is developed to study the cross-sectional differences in stock returns of individual firms and associated portfolio models. Applications of these techniques to evaluate the performance of new trading strategies and hedge fund managers are also discussed. Furthermore, time-series models are introduced to model and forecast both time-varying aggregate stock returns and volatility. The course prepares students to conduct empirical research in an academic or business setting. Stata will be used for the class.	BU.232.701 and (BU.510.601 or BU.914.610)	
		Credits: 2.00		
<b>BU.230.620</b>				
	Financial Modeling and Valuation	The objective of this course is to introduce students to the current practices in financial modeling and valuation using Excel. Students will learn how to manipulate financial data and how to perform financial analyses using various analytical tools. Using the skills, students will learn how to forecast financial statements and build interactive valuation models for firms. By the end of the course, students will complete an equity research paper. One important aspect of this course is also to introduce students to portfolio modeling, efficient frontiers, and portfolio choice subject to constraints.	BU.232.701	
		Credits: 2.00		

<b>BU.230.640</b>				
	Development Modeling and Risk Analysis	This course emphasizes the estimation of development and investment budgets, including construction costs, construction loan interest, tenant improvements, lease-up reserves, marketing costs, and other soft costs. Ongoing property operations, including lease-up and refit allowances, are also examined. In this context, various capital structures are analyzed including mortgage loans, various equity investors, and possible refinancing opportunities. In addition, critical risks are examined using sensitivity analysis, Monte Carlo simulation, scenario analysis to calculate the most likely returns, and the probability of loss. This course was previously titled Development II.	BU.241.610 or BU.231.620	
		Credits: 2.00		
<b>BU.230.710</b>				
	Quantitative Financial Analysis	This course explores the fundamentals of Monte Carlo simulation techniques and their applications in finance. Using MATLAB as the programming platform, this course intends to train students to become familiar with simulation techniques in financial modeling, such as derivative pricing and market risk assessment. This course is taught mostly using hands-on computer exercises, and students are required to bring their laptops to class.	BU.232.710 and BU.232.701	
		Credits: 2.00		
<b>BU.230.730</b>				

	Managing Financial Risk	The course offers an introduction to financial risk management. Risk management is a complex process of identifying, measuring, and controlling risk exposure. The course will balance theory and practical application. Topics include market and credit risks, liquidity, and operational and legal risks, including volatility modeling, and derivatives as tools for controlling risk. Using modern econometric models, such as ARCH and GARCH, along with widely used quantitative methods (Monte Carlo simulation and Filtered Historical simulation), the course will describe how to measure and control risk exposure towards various types of risks, especially market and credit risk.	(BU.220.620 or BU.912.611) and BU.232.710	
		Credits: 2.00		
<b>BU.230.750</b>				
	Financial Crises and Contagion	This course takes students through the history of finance in the United States, with a focus on the last 100 years of financial bubbles, manias, and scandals, from the crash of 1929 to the thrift crisis of the 1980s; Enron and other accounting debacles; and the mortgage meltdown known as the Great Recession. Examining the upheavals is key to understanding how the landscape and laws of modern financial markets evolved and where they might be headed.	BU.231.620 or BU.910.611	
		With the Great Recession of 2007–2012, the United States experienced the biggest economic crisis and ensuing downturn since the crash of 1929 and Great Depression of the 1930s. While every boom-and-bust is unique, all share certain characteristics—most notably, the seemingly inexhaustible ability of humans to forget the lessons of financial history. This forgetfulness comes at great expense to society. This course provides a tour of the country’s major boom-and-bust-cycles, with a focus on last century, and particularly the last three decades, when such events became more numerous. After each debacle, laws and rules changed. Executives must know what those changes are and the reasoning behind them, but they will have a competitive edge if they also remember and understand the events underpinning them.		
		Credits: 2.00		
<b>BU.231.620</b>				

	Corporate Finance	This course is designed to introduce students to the basic, yet fundamental, issues of modern finance. The goal of the course is to provide students with the basic tools needed to successfully complete more advanced finance courses. This course deals primarily with a firm's investment and financing decisions, and its interactions with the capital markets. Students are taught the fundamental principles of financial valuation and analysis, which provide a solid foundation for all other finance courses.	BU.210.620 or BU.234.610	
		Credits: 2.00		
<b>BU.231.710</b>				
	Financial Institutions	The financial service industry plays a significant role in the economy and it continues to undergo dramatic changes. Financial institutions (FIs) perform the essential function of channeling funds from savers to users of funds. Financial intermediation is subject to a significant risk as the recent financial crisis vividly illustrated. The risk management of FIs is crucial not only in maximizing shareholders' value, but also in ensuring the stability of the whole financial system. In this course, students will acquire a working knowledge of (a) the function of financial intermediaries in the economy, and how this role has changed in the United States; (b) the sources of risks banks are exposed to (e.g., interest rate risk, market risk, credit risk, liquidity risk, sovereign risk) and how they manage them, and (c) elements of capital regulation.	BU.231.620 or BU.910.611	
		Credits: 2.00		
<b>BU.231.720</b>				

	Corporate Governance	The course is mainly about the practical implications of the principal-agent dilemma due to separation of ownership and control. The separation leads to conflicts of interest between the principals (shareholders) and agents (management) that results in increased risk. The value of a firm depends on good corporate governance practices that protects shareholders rights and lowers the cost of capital due to better risk mitigation. The set of good governance practices, rules, and regulations that attract investments and creates jobs, as well as effective environmental and socially responsible considerations promote opportunities for better access to finance and improve firm value. The three main topics in this course are the shareholders; the board; and the management. Topics cover executive compensation practices and policies, boardroom structure and practices, benefits and problems of corporate disclosure and transparency, and the value of the shareholder vote. The course also covers management abuses, takeovers, mergers and acquisitions, and the role of financial institutions and credit rating agencies. We emphasize transparency, accountability, responsibility, and fair and equitable treatment of all shareholders to help implement good corporate governance practices that reduce agency conflicts and reduce risk. Good corporate governance practices is about building the business case rather than simple compliance. A corporate governance scoring project demonstrates how a company's sustainable, socially responsible investing and governance (ESG) standing profile can be rated as an indicator for building investor confidence and ensuring shareholder protection.	BU.231.620
		Credits: 2.00	
<b>BU.231.740</b>			
	Mergers and Acquisitions	This course explores the incentives for using mergers, acquisitions, divestitures, and alliances as vehicles to achieve corporate strategic objectives. Students address analytical techniques often employed in M&A, negotiation strategies, and valuation, and the evolution of M&A transactions. Also discussed are problems encountered in post-merger integration, and alternative modes of market entry, including joint ventures and internal development.	BU.231.620 or BU.910.611
		Credits: 2.00	
<b>BU.231.790</b>			

	Advanced Corporate Finance	By employing a case study approach, students learn how the theoretical concepts and tools learned in Corporate Finance and other finance classes are applied in solving real-world problems. Through such key concepts as financial forecasting, cost of capital, capital budgeting, optimal capital structure, dividend policy, and firm valuation, students learn the analytical techniques necessary to make rational financial decisions.	BU.231.620 or BU.910.611	
		Credits: 2.00		
<b>BU.232.610</b>				
	Computational Finance	Modern financial markets are characterized by the widespread use of ever more powerful computational technology. The solutions to pricing, hedging, and portfolio allocation problems require familiarity with it, and so does effective trading in an age in which accuracy and speed are essential. This course teaches students the fundamentals of coding. The emphasis is on coding for inferential, modeling and simulation purposes. While class instruction will be based on MATLAB, one of the most popular programming platforms in the industry and the common language of choice for all courses in this program, students will also be exposed to other popular programming languages.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.232.620</b>				
	Linear Econometrics for Finance	Linear Econometrics deals with the estimation of linear economic models. This is a quantitative class requiring strong foundations in multivariate calculus, matrix algebra, probability and statistics as pre-requisites. The course covers linear regression models with both finite-sample and large-sample inference. Topics include the univariate linear regression model, the multivariate linear regression model, regression functional form, conditional heteroskedasticity, weighted least squares, generalized least squares, instrumental variables, stationary and nonstationary time	BU.510.601	

		series models and linear panel regression models. Particular emphasis is placed on the notion of causality.		
		Credits: 2.00		
<b>BU.232.630</b>				
	Non-Linear Econometrics for Finance	Nonlinear Econometrics introduces advanced econometric tools needed to analyze financial data and build sophisticated nonlinear financial models. This is an advanced class requiring strong foundations in multivariate calculus, matrix algebra, probability and statistics as prerequisites. Linear Econometrics is also a pre-requisite. The course will cover methods of asymptotic (i.e., large-sample) inference in extremum (nonlinear) modeling. Among them, particular emphasis is placed on the generalized method of moments and maximum likelihood estimation. Simulation-based methods, like the simulated method-of-moments and indirect inference, will also be studied.	BU.510.601 and BU.232.620	
		Credits: 2.00		
<b>BU.232.640</b>				
	Empirical Finance	This course introduces students to the empirical methods used in financial econometrics. The techniques we study are employed by a wide range of institutions including commercial banks, non-banking financial companies, mutual funds, hedge funds, investment banks, as well as central banks, consulting firms and governments. Applications include the evaluation and backtesting of trading strategies, risk management and hedging, transactional analysis, and applications in regulation and policy making. The course draws on the econometrics sequence taught in the program but the emphasis is on how to use the techniques in actual applications such as event studies, the analysis of short- and long-run stock returns, multi-factor models, and the analysis of credit risk. The course embraces the traditional approaches in financial econometrics as well as predictive modeling from the data sciences and applications in “Big Data” environments. Students will learn	BU.510.601 and BU.232.620 and BU.232.630	

		about the typical datasets used in financial econometrics and learn how to design, code, and analyze the models used to analyze these datasets.	
		Credits: 2.00	
<b>BU.232.650</b>			
	Continuous Time Finance	This course provides a conceptual understanding of the basic ideas in mathematical finance and shows how these ideas are applied to practical situations, through the development and use of financial models. Mathematical abstractions are created which deal with issues including option pricing, risk neutrality, incomplete markets, stochastic volatility, and other responses to the realization of a variety of “unknowns”. Topics include Ito calculus, options theory, martingale pricing, exotic options, jump-diffusion processes, and variance gamma models.	BU.232.710
		Credits: 2.00	
<b>BU.232.701</b>			

	Investments	This course offers the financial theory and quantitative tools necessary for understanding how different kinds of financial instruments are priced and used for investment decisions. Rather than delving into the details of current practice, it takes a rigorous and critical view to the process of investing. The aim is to provide the students with a lasting conceptual framework in which to view and analyze investment decisions. Students learn how to value assets given forecasts of future cash flows and the risk characteristics of different asset classes. The focus is mainly on common stocks, but fixed income securities (bonds) and derivative securities (options) are also analyzed. Topics covered include: time value of money, optimal portfolio selection based on mean–variance analysis, economic and statistical models of the relation between risk and return (including the CAPM and multifactor models), term structure of interest rates, no-arbitrage derivative pricing, and market efficiency (including asset pricing anomalies and behavioral finance).	(BU.510.601 or BU.914.610) and (BU.231.620 or BU.910.611)
		Credits: 2.00	
<b>BU.232.710</b>			
	Derivatives	This course offers a rich overview of forwards, futures, swaps and options. The course will cover both the actual working of derivatives and the analytical tools needed to effectively understand derivatives. Skills are developed in pricing analysis, use of pricing models, trading, and hedging strategies. The strategies are developed to match specific economic goals, such as portfolio risk reduction.	BU.231.620 or BU.910.611
		Credits: 2.00	
<b>BU.232.715</b>			

	Financial Stability	Financial stability has become an explicit objective of central banks around the world. The design of bank regulatory requirements increasingly focuses on mitigating systemic risk as a source of financial instability. Stress testing has emerged as a major risk management tool for both supervisors and banks. This course introduces the analytical underpinnings of the current methodologies to monitor and manage systemic risks. Key learning tools are in-class workshops and case studies drawn from central bank financial stability reports, rating agencies reports, and IMF financial stability assessments. Students will acquire a detailed knowledge of (a) the role of financial frictions in determining macro-financial linkages; (b) current methodologies of systemic risk measurement; (c) micro- and macro- prudential bank regulation; and (d) the architecture of banking system-wide stress testing exercises.	BU.510.601	
		Credits: 2.00		
<b>BU.232.720</b>				
	Fixed Income	Fixed Income securities represent the largest market in the world. However, given the complexity and the relative lack of liquidity in this market, we generally do not hear much about Fixed Income. This advanced course focuses on how to navigate the complexity of the global debt market in a practical way. The course covers major markets and instruments including treasuries, fixed income swaps, forwards, futures, term structure theories and risk management techniques. By completing the course, students will learn actionable concepts and tools about some of the major activities on Wall Street in terms of size and opportunities. The course is both theoretical and practical.	BU.232.701 and (BU.231.620 or BU.910.611)	
		Credits: 2.00		
<b>BU.232.725</b>				

	Emerging Markets	What makes emerging financial markets different from those in the US, Western Europe, or Japan? What are the benefits of adding these markets to traditional investment portfolios? Why invest in certain countries versus others? Within a country, which asset class should we invest in - debt or equity? How do hedge funds approach these markets vs. traditional investors? From the practical perspective of a U.S. institutional investor, this course tries to help answer these questions. Through videos, readings, problem sets, and live online sessions students should develop greater abilities to analyze global macro trends and country fundamentals, master portfolio construction concepts, and implement practical investment strategies.	BU.231.620 and BU.232.701
		Credits: 2.00	
<b>BU.232.730</b>			
	Wealth Management	This course provides strategies for coordinating financial planning for high-net-worth individuals. Students will become skilled at identifying and dealing appropriately with clients' goals, needs, and problems in the areas of investment and investment planning.	BU.231.620 or BU.910.611 or BU.234.610
		Credits: 2.00	
<b>BU.232.750</b>			
	Advanced Portfolio Management	This is an advanced course designed as a comprehensive study of primarily institutional investment analysis and portfolio management. It will approach investment management as a rational decision-making process based on the theoretical foundation and best practice techniques of investments. The course is presented to help understand how the basic theories of managing a portfolio of financial assets within the risk–return framework will be addressed. Due to the increasing globalization in the capital markets, portfolio management has become an international business. Thus, a good understanding of valuation of equities and fixed income securities, options and futures, and other investment instruments within a global setting is necessary to maintain optimal investment in this dynamic environment. The course emphasizes portfolio management as a dynamic process in which the concepts from security analysis are factored into the dynamics of strategic and tactical investment decision-making criteria. The course covers the formulation of appropriate investment portfolio objectives for a key institutional investor, and alternative techniques for achieving them. Determination and	BU.230.620 or BU.930.634

		allocation of asset classes—including bonds, equities, and alternative investment instruments into efficient portfolios—will be discussed, along with such topics as portfolio optimization, risk management, asset selection and allocation, investment management, monitoring, and revising and rebalancing a portfolio. Finally, criteria for evaluating portfolio performance will be discussed. Students are encouraged to incorporate corporate social responsibility and sustainable investing concepts into class discussions and deliverables.	
		Credits: 2.00	
<b>BU.232.770</b>			
	Cryptos and Blockchain	This course introduces students to one of the most exciting financial technological innovation in modern time -- the Blockchain. Students will gain a strong understanding of how blocks are created and linked together by cryptography. Within this decentralized peer-to-peer ledger system, students will examine in detail its construction, immutability, and security with a keen focus on the potential benefits and weaknesses of its fundamental structure as applied to businesses and organizations. Moreover, students will learn how companies are applying Blockchain technologies in practice. We will review the first use-case of the Blockchain – Bitcoins. Additionally, the course will chart the evolution of Bitcoins to Ethereum and the advantages of Ethereum’s smart-contract framework. Additionally, we will dive into the growing alternative crypto-currencies markets. Initial Coin Offerings (ICOs) will be discussed with focus on their potential implications for destabilizing traditional funding sources. The regulatory challenges and current ICO best practices will be reviewed and analyzed. We will be discussing this industry from the perspective of the academic, entrepreneur, investor, and software engineer. The course will be delivered by standard lectures, presentations, case study discussions, assignments, guest speakers, programming exercises in Python, group presentations, and a final comprehensive exam.	No Prerequisite(s)

		Credits: 2.00	
<b>BU.232.790</b>			
	Advanced Hedge Fund Strategies	This course surveys a broad range of hedge fund and proprietary trading strategies with an emphasis on understanding their fundamental investment process. Students will gain practical knowledge in regards to creating, back-testing, and implementing these strategies. There will be particular focus on the theoretical justification for the existence of inefficiencies or risk premium, and the successful extraction of them. The course will cover the gambit of popular hedge funds strategies, such as Long/Short, Event-Driven (Distressed, Risk Arbitrage), Equity Market Neutral, Statistical Arbitrage, Dedicated Short-Bias, Convertible Arbitrage, Emerging Markets, Fixed Income Arbitrage, Global Macro, Managed Futures, and Multi-Strategy. Particular attention will be placed on understanding the mechanics of the alpha-extraction methodology. An example of the type of question that will be addressed in this course is: What do hedge fund managers strive to capture, and how do they do it? Hidden risks and limitations associated with the implementation of such strategies will be highlighted throughout this course. Upon successful completion of this course, students should gain a firm understanding of the popular hedge fund trading strategies currently employed in the industry.	(BU.231.620 or BU.910.611) and BU.232.701
		This course is presented from a practitioner's perspective and will assume that students have knowledge of basic financial theory, portfolio construction, arbitrage concepts, return calculations, statistics, and financial instruments and derivative products. The class projects will be highly quantitative and will require that students be able to analyze and manipulate market data using statistical and mathematical modeling techniques.	
		Credits: 2.00	
<b>BU.233.730</b>			
	Entrepreneurial Finance	This course introduces students to identifying, accessing, and evaluating sources of financing for start-ups and expanding technology companies. The approach uses case studies, group interaction, and presentations from experts in the field. Attention will be given to financial theory, risk assessment, valuation options,	BU.231.620 or BU.910.611

		term sheets, due diligence techniques, and the setting up of financial reports for monitoring progress toward meeting milestones.		
		Credits: 2.00		
<b>BU.234.610</b>				
	Real Estate and Infrastructure Finance	This course examines selected techniques and issues in the area of real estate finance. Special emphasis will be placed on the design and valuation of mortgage instruments. This class will be conducted using a lecture format. While lectures will follow the textbook to some extent, supplemental readings will be required. Students are assumed to have some knowledge of finance. Before taking this class, it is important for students to have a clear understanding of the time value of money concept and knowledge of how to use spreadsheets to solve time value of money problems. Knowing how to use a calculator to solve present value problems (but without a clear understanding of the underlying concept) is not sufficient for tackling the course material of this class. Use of calculators or spreadsheets will not be taught in this class.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.241.610</b>				
	Real Estate Investment and Development	This course provides an overview of the real estate development and investment processes, as well as introduces students to various disciplines, professionals, and industry sectors, and how they interact and participate in these processes. Students learn to apply direct capitalization models and discounted cash flow models to estimate real estate values by converting future income expectations into present values. These values are compared to current costs and prices to determine the financial feasibility of proposed projects and existing properties. The concept of highest and best use is also introduced and discussed. The use of Excel software is introduced along with the CoStar database. This course was previously titled Development I.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.241.620</b>				

	Design and Construction Feasibility	This course examines site planning, building design, and managing the construction project. The class is divided into two sections. The design section focuses on the conceptualization of the project, and the construction section looks at the management of the implementation of the project. Emphasis is placed on how the selection of materials, equipment, and systems can affect both the function and cost of the building. The course also includes a detailed review of the forms of construction contracts and associated documents commonly used in the industry. This course was previously titled Managing Construction Projects.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.241.725</b>			
	Global Perspectives in Real Estate	This course focuses on real estate and infrastructure investment and financing issues around the globe. Using a case approach supplemented by assigned articles and textbook readings, the course examines the global nature of the real estate asset class, the market players and the issues they encounter when identifying opportunities, and executing real estate strategies in various global markets. Topics covered include risks and returns of international real estate investment; challenges in international real estate development; identification of opportunities and execution of real estate strategies around the world; REITs around the globe; and global real estate portfolio considerations.	BU.241.610 or BU.234.610 or BU.231.620
		Credits: 2.00	
<b>BU.241.735</b>			
	Infrastructure Development for Sustainable Cities	This course provides an understanding of the demand for, and supply of, sustainable infrastructure related to the pace of urbanization across the globe. The challenges for both developing and developed countries is examined from the perspective of potential new strategies, new technologies, new business models, and new financing techniques that could make a difference in addressing a full range of infrastructure needs while addressing sustainability objectives. In terms of sustainability, this will include an understanding of the demand and supply side, cultural factors, the policy framework, and the potential impact of technology and innovation. This course was previously titled Sustainable Cities: Urbanization, Infrastructure, and Strategic Choices.	No Prerequisite(s)

		Credits: 2.00		
<b>BU.241.740</b>				
	Project Finance and Public-Private Infrastructure Delivery	Project financing, as an alternative to conventional direct financing, is a well-established technique for large capital intensive projects. It grew in importance in the 1990s as a means of financing projects designed to help meet the tremendous infrastructure needs existing in both developed and developing countries. Whether project financing is suitable for such a purpose will depend, ultimately, on if this financing method offers the most cost-effective means of accomplishing the project after all social and private benefits and costs are considered. This course will discuss the basic project financing framework; the rationale for using project financing as opposed to direct conventional financing; the identification and management of risks associated with a large scale project; evaluating a project's viability using analytical tools; sources of project funds; using public-private partnerships as a mode of project financing; and the crafting of contractual arrangements to allocate a project's risk and economic rewards among the parties involved.	BU.234.610 or BU.231.620 or BU.910.611	
		Credits: 2.00		
<b>BU.241.750</b>				
	Advanced Valuation and Investment Analysis	This course will integrate advanced valuation principles with the science of econometrics. Trend analysis, in the form of regression analysis, is used to reveal the influences on value for real estate. This integrates the results of regression analysis into the discounted cash flow methodology. This course is intended to prepare the student for real-world challenges in valuing complex real estate.	BU.242.715 or BU.510.601	
		Credits: 2.00		

<b>BU.241.760</b>				
	Strategic Commercial Leasing	Strategic Commercial Leasing teaches students how to understand and negotiate commercial leases to create maximum value for property owners of all sizes, including institutional owners and investors. The course provides in-depth coverage the economic, legal and control issues related to commercial leasing. In-class discussions include the risk-return considerations property owners must evaluate when negotiating individual lease provisions. Leasing considerations include the impact on property valuation, property financing and asset disposition strategies. Students evaluate how a company's leasing strategy impacts their overall real estate portfolio risk, valuation and returns.	No Prerequisite(s)	
		The course structure will include lectures, group discussion, and in-class negotiation. Guest speakers will include institutional owners, lenders and appraisers, enabling students to understand how lease terms are evaluated by a range of professionals. A special focus will be on how institutional owners and REITS view leases, various tenant uses, and overall leasing strategies. This highly interactive course will also cover the differences between apartment leases and commercial leases.		
		Credits: 2.00		
<b>BU.241.770</b>				
	Smart Growth, Infrastructure and Real Estate Development	For the past twenty years smart growth has had an increasingly significant impact on the built environment. Smart growth results in better cost-benefit outcomes for both developers and the public sector, more efficient and appealing land use in prime locations, and new financing tools.	No Prerequisite(s)	
		This course provides an understanding of historic development patterns of cities and towns, the emergence of the American suburb, and the countervailing smart growth approach. Examined are the principles behind smart growth, the demographic and economic forces furthering the widespread adoptions of these principles—urban revitalization, smaller households, a more transient workforce and racial and ethnic diversity. The growing strength of the Baby Boomers and the Millennials on the market is discussed. Attention is given to the increasingly important impacts of climate change, sustainability, changing tools of economic development competitiveness, health and equity of communities.		

		The main tools of smart growth, such as higher density, mix of land uses, transportation and housing choices, transit-oriented development, walkable neighborhoods, and form-based zoning are examined. Collectively many of these tools are parts of Complete Streets policies. The impacts of public policies and private demand are discussed.		
		Credits: 2.00		
<b>BU.242.601</b>				
	Real Estate Market Feasibility Study	Understanding the urban environment is the key to understanding the marketability of real estate. Likewise, understanding the marketability of real estate is the key to making wise investment decisions. In this course, students will examine the forces that form, shape, and influence the growth of cities with the goal of understanding how real estate benefits and suffers from these dynamics. Students will explore the techniques for forecasting demand and supply in specific markets, as well as evaluating sites based on product criteria. Products include residential, commercial, and retail properties. Final sessions deal with feasibility analysis.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.242.701</b>				
	Real Estate Investment Trusts: Analysis and Structuring	This course examines the role that Real Estate Investment Trusts play in commercial real estate capital and investment. Topics include the history, legal structure, and financial basis for establishing REIT portfolios. Students will examine the role of public and private capital markets in facilitating commercial real estate investments through REITs using real world examples. The primary course objective combines public company finance theory with practical real estate capital applications for intelligent business decisions in complex scenarios. Subjects include a history of the REIT industry; how REITs compete for capital and control investment risk; how to value individual REIT stocks and REIT	BU.234.610 or BU.231.620 or BU.241.610	

		shares generally; the regulatory and capital markets process for the REIT IPO; quarterly and annual filings; follow-on capital raising; and recent developments and strategies in the REIT industry. This course was previously titled Capital Markets and Real Estate.		
		Credits: 2.00		
<b>BU.242.710</b>				
	Real Estate Funds and Portfolio Management	A significant amount of commercial real estate investments is held in the form of large real estate funds. These funds typically range in size from \$50 million to over \$50 billion. Many of the large office buildings, regional malls, apartment buildings, and industrial parks in the country are held in these funds. Some funds invest in senior housing, student housing, parking, health care, and even farm and timberland. The managers of these funds are large institutional investment management firms that manage the properties on behalf of wealthy investors, pension funds, endowments, and sovereign wealth funds. The purpose of this course is to understand how these funds are organized, how they arrive at an investment strategy, and how to evaluate how they have actually performed relative to that strategy. Case studies and actual industry data will be used to reinforce the concepts discussed in the course. This course was previously titled Managing Real Estate Portfolios.	BU.231.620 or BU.234.610	
		Credits: 2.00		
<b>BU.242.715</b>				

	Real Estate and Infrastructure Valuation	This course integrates the real estate curriculum with the valuation process. The three traditional approaches to value (land and site valuation; building cost estimates, depreciation, direct capitalization; and yield capitalization) will all be covered in the course. This course is integral for students pursuing the appraisal/valuation concentration within the MS Real Estate and Infrastructure Program. This course was previously titled Advanced Valuation and Investment Analysis.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.242.720</b>				
	Real Estate Capital Market Analysis	This course examines selected topics and issues related to real estate capital markets. Special emphasis will be placed on mortgage backed securities (MBSs) and real estate investment trusts (REITs). This class will be conducted using a lecture format. While lectures will follow the table of contents of the textbook rather closely, quite often supplemental readings are required. Students are assumed to have some knowledge of real estate finance. Before taking this class, it is important that students have a clear understanding of the design of mortgages and knowledge of how to use spreadsheets to solve mortgage related problems. Knowing how to use a calculator to solve present value problems is not sufficient for tackling the course materials of this class. This course was previously titled Real Estate Finance II.	BU.234.610 or BU.231.620	
		Credits: 2.00		
<b>BU.245.790</b>				
	Real Estate and Infrastructure Capstone	The Capstone course provides you with a mentored professional real estate industry experience that integrates all aspects of the MS in Real Estate and Infrastructure curriculum. You may choose one of three options:	No Prerequisite(s)	
		A real estate and/or infrastructure development project proposal. Students selecting this option work in teams to produce a state-of-the-art development proposal for a challenging site selected by Capstone faculty and judged by a project review board of faculty and industry professionals.		
		A real estate and infrastructure research. Students selecting this option work individually or in teams to conduct original research and analysis of a critical issue in real estate and infrastructure development.		

		An internship with a real estate company. Students selecting this option work on a portfolio of defined assignments mentored by an industry professional in a real estate company, agency, professional or industry association, or portfolio management company.		
		Capstone choices will differ based on individual interests and career goals, but you are encouraged to choose experiences that provide an opportunity for growth and showcase your professional knowledge, skills and talent. Examples include a development proposal for a brownfield site; an analysis of weather-related risks in coastal infrastructure security; or a written participation/ observation report based on a supervised internship. The structure of deliverables may vary, but deliverables for all capstone experiences will include a written report, presentation slide deck, and oral presentation. Students must receive approval and permission from their academic adviser before enrolling in this course.		
		Credits: 2.00		
<b>BU.300.620</b>				
	Managing Complex Projects	This course aims to equip you with effective techniques, methods, and practices for defining, scoping, and planning a project, and then managing it to successful completion. Special areas of emphasis in the course are driven by practical experiences with large and complex projects frequently being late, over budget, and failing to meet specifications. We will pay particular attention to understanding project complexity, risk, and uncertainty so that you are prepared to address these challenges to success. You will gain experience using a leading project management software package.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.300.700</b>				
	Developing Internet Systems and Services	The subject of this course is the development of services that are delivered over the Internet: system feature specification, design, user interface, implementation, and the role of development environments. Increasingly the delivery of services and user access to them is driven by considerations of third-party development, user platform specifications, security, privacy, and performance. Much of the focus of contemporary development is on mobile apps,	No Prerequisite(s)	

		reflecting the changing modes of behavior and expectations of users for instant availability of highly special-purpose and location-aware applications. This course will consider these trends and their implications for design and development.		
		Credits: 2.00		
<b>BU.330.705</b>				
	Data Networks: Infrastructures & Emerging Technologies	This course covers technological advancements in telecommunications and emerging wireless mobile systems, with emphasis on their business application: how the nature of these advances are driving business models and amplifying the strengths of today's firms; how businesses can select, integrate, and apply telecom and emerging mobile systems and cloud services into their business processes to maximize their value creation value capture, and value delivery. Business applications and contents delivered by mobile systems in public and private sectors – such as in health care services (mHealth), in financial and banking industries (mCommerce), mobile money and credits in social entrepreneurship will be covered. Analysis and selection of the needed telecom and mobile technologies, necessary to support business applications and processes, are examined. This course enables the students to gain an in-depth understanding of different telecom network systems, their developments and international standards. Finally, managerial, business critical, and technical issues such as technology evaluation, cost vs. performance trade-offs analysis, requirements analysis and vendor selection as they are needed by today's commercial and public organizations are covered.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.330.730</b>				
	Cybersecurity	<p>This course considers the contemporary cybersecurity threat landscape facing organizations. Students apply various risk frameworks to provide structure to the decision-making needed to invest in resources for security controls and countermeasures. Multiple strategies are explored, including policies, procedures, training, strategic alliances, technologies, and methodologies, especially drawing upon risk management and financial decision-making that are used in other sectors of an organization. Topics include qualitative and quantitative risk analysis, audits, metrics, vulnerability assessment, capital budgeting, return on security investment, legal and regulatory compliance, and security best practices. The course will prepare students to be successful in taking on leadership roles in assuring the security of an organization's operations.</p>	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.330.740</b>				

	Large Scale Computing with Hadoop	<p>Internet of Things (IoT) is connecting almost all the components together in every aspect of business and our daily life. As a result, huge amount of data is being generated. The term “big data” implies the large scale of data that cannot be stored on one single computer. The analyses of such large-scaled data usually require massively parallel software running on tens, hundreds, or even thousands of servers. Enterprise technology managers are often called upon to organize large-scaled data repositories, to manage and schedule resources between technology components, and to support decision making based on information that resides in distributed data sources. This course prepares students with fundamental concepts of distributed data systems and analytics algorithms. It equips students with advanced techniques to extract the value from the large-scaled data generated and collected in everyday business life. The course uses a hands-on, learning-by-doing approach to understand some of the key technologies within the Hadoop ecosystem, which is the current state of art to provide a framework for distributed storage and processing of large-scaled data. Topics include: enterprise Application Programming Interfaces (APIs), API connectivity to distributed networks, MapReduce model, distributed file system (HDFS), distributed system resources scheduling (Yarn) and user interface (Hue), transferring data in and out of Hadoop (Sqoop), distributed data warehousing (Hive), and high-level distributed platforms such as Pig and Spark. The focus is on creating awareness of the technologies, allowing some level of familiarity with them through assignments, and enabling some strategic thinking around the use of these in business.</p>	No Prerequisite(s)
		Credits: 2.00	
<b>BU.330.750</b>			
	AI: Principles and Business Applications	<p>This course covers the foundations of Artificial Intelligence (AI) technologies with emphasis on their business applications. It will also examine models of machine learning and pattern optimizations. The course will enable the student to gain a fundamental understanding of the foundations and applications of different AI technologies, analysis of the required AI algorithms, and machine learning technologies, all necessary to support different business applications. It will require basic uses and applications of AI tools (IBM Watson, Python, or R); however, it also includes teaching software coding.</p>	No Prerequisite(s)

		Credits: 2.00	
<b>BU.330.760</b>			
	Deep Learning with Unstructured Data	<p>With the enterprises' usage of Information and Communication Technology (ICT), a huge amount of data is being generated every second. Much of this big data is unstructured and loosely connected. Enterprise technology managers are often called upon to support decision making based on information that resides in this unstructured data. Managers of technology need to be able to support such decision making by delivering analytical applications via enterprise wide APIs and secure corporate networks. The ability to organize large repositories of unstructured data and run analytical applications on them is key creating an effective information architecture for the modern corporation. This course prepares students to manage enterprise technology needs by acquiring advanced data analytics skills for driving business insights from large amounts of unstructured data using network analysis and deep learning. The technology function in corporation is increasingly called upon to involve both managers and analysts to support and participate in data driven decision making. Therefore, this course uses a hands-on, learning-by-doing approach. Topics include: organization of corporate data warehouses containing unstructured data, unstructured data distribution through enterprise APIs, graph theory, network evolution and block models, API-based visualization methods, graphical models, deep feedforward network, regularization, convolutional neural network, and recurrent neural network. Students will use Python packages such as NetworkX, graph-tool, TensorFlow, Theano and Keras. Students will also use Gephi, an open source software for exploring and manipulating networks. The focus is on creating awareness of the technologies, allowing some level of familiarity with them through assignments, and enabling some strategic thinking around the use of these in business.</p>	No Prerequisite(s)
		Credits: 2.00	
<b>BU.330.770</b>			

	Database Management	The emerging trend of organizations and business decision making is based on data-driven decision making. In fact, database systems are central to most organizations' information systems strategies. At any organizational level, users are expected to face frequent contact with and use of database systems. Therefore, skills in using such systems, which include understanding the capabilities and limitations of the systems, identifying whether to access data directly or through technical specialists and knowing how to retrieve and utilize the information effectively became essential in any industry vertical. Also, skills in designing new systems and related applications are distinct advantage and necessity today. The Relational Database Management System (RDBMS) is one type of database systems, which is widely used and is the primary focus of this course.	No Prerequisite(s)	
		Further, the course will provide students with an opportunity to apply the knowledge they learn from the lectures, homework assignments, SQL assignments, and a database implementation project.		
		Credits: 2.00		
<b>BU.330.780</b>				
	Data Science and Business Intelligence	This course introduces a set of fundamental principles and a framework that guide extracting business insights from data to generate competitive advantage. We will discuss how the ubiquity and massiveness of digital data and the application of business intelligence have changed competitive landscapes. The business intelligence techniques that will be covered in this course include data visualization, online social network and sentiment analysis (for user-generated content), and predictive analytics (e.g. classification and clustering), which are widely used in the real world. The topics and cases discussed in this course cover a wide range of fields, including marketing, finance, health care, and more. This course is not a statistics or computer programming course. The emphasis will be on applications and interpretations of the results from business intelligence techniques for making business decisions. Students will apply these techniques in hands-on exercises as we analyze strategic concepts, which will allow students to deepen their understanding of the fundamentals and the applicability of business intelligence.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.330.790</b>				
	Applied IS Architecture	This course provides students with an integration over prior learning and an application of IS principles and practices in a challenging setting of a significant case or real organization. Within this project-based context, students investigate contemporary information systems and technology architectures that constitute operational and productivity platforms for modern enterprises.	BU.330.705	
		Credits: 2.00		
<b>BU.350.620</b>				
	Information Systems	This course addresses how markets, market mechanisms, and channels of product and service delivery are impacted and often transformed by information and communication technologies. Students will learn how technology, brought together with people and processes into systems, contributes to leveraging the creation of business value. The course considers different elements of the information architecture of the corporation and its impact on the nature of the work and the structure of the corporation.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.350.710</b>				
	IT and Global Sourcing Strategy	This course covers information technology developments and global-sourcing strategies. Specifically, it includes two interrelated topics. First, it covers strategic planning models in which it examines business and corporate strategies which require students to assume the role of a general manager or chief technology officer (CTO) where they have to cope with tremendous complexity, uncertainty, and inadequate information to make strategic decisions. Second, this course covers how advances in telecommunication technology along with the process of global collaboration and value creation enable the creation and delivery of new products and services. The course also explores various country evaluations and risk analyses techniques, and the opportunities and threats that business organizations face as a result of these business and technological trends. Finally, this course examines various global-sourcing and collaborations strategies, the role of standardization in global supply chains integration, and how technology influences new forms of value creation such as public-private partnerships and hybrid entrepreneurial forms in developing economies and how their businesses can develop capabilities, capacities, and competencies	BU.350.620	

		required to participate in global collaboration and value creation networks.		
		Credits: 2.00		
<b>BU.360.701</b>				
	Competitive Intelligence	Competitive Intelligence (CI), as defined by the Society of Competitive Intelligence Professionals (SCIP), is a systematic and ethical program for gathering, analyzing, and managing external information that can affect an organization's plans, decisions, and operations. Students learn to apply the CI process and CI-related methodologies, techniques, and tools to better analyze an organization's current and future competitive position. Students apply analytical and socio-technical techniques to improve organizational decision making as related to CI, and should understand the issues related to the collection, analysis, and management of external information.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.410.601</b>				
	Marketing Research	This course provides students with a solid foundation in consumers' decision making based on theoretical and empirical findings from the fields of psychology, anthropology, and sociology. Topics include consumers' knowledge and involvement, attention, comprehension, learning, attitude, and purchase intention. Emphasis on cognitive learning, social influence and persuasion, and behavioral science provides an overview of the various methods used to drive behavioral change and social impact when marketing products, services and social issues. Also explored is the practical impact of consumer behavior analysis on marketing mix strategies, market segmentation/positioning, brand loyalty, persuasion process, and promotion.	(BU.410.620 or BU.911.610) and (BU.510.601 or BU.914.610)	
		Credits: 2.00		
<b>BU.410.620</b>				

	Marketing Management	This course covers principles of market-driven managerial decision making that determine competitiveness in dynamic consumer and organizational markets. Particular areas of emphasis include industry analyses, dynamics of competition, market segmentation, target marketing, channels of distribution, and product and pricing decisions. In-depth analytical skills are developed through case analyses, class discussions, and applied projects.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.420.710</b>			
	Consumer Behavior	This course provides students with a solid foundation in consumers' decision making based on theoretical and empirical findings from the fields of psychology, anthropology, and sociology. Topics include consumers' knowledge and involvement, attention, comprehension, learning, attitude, and purchase intention. Emphasis on cognitive learning, social influence and persuasion, and behavioral science provides an overview of the various methods used to drive behavioral change and social impact when marketing products, services and social issues. Also explored is the practical impact of consumer behavior analysis on marketing mix strategies, market segmentation/positioning, brand loyalty, persuasion process, and promotion.	BU.911.610 or BU.410.620
		Credits: 2.00	
<b>BU.420.720</b>			

	Customer Relationship Management	Students investigate the critical role and impact that customer relationship management (CRM) plays in marketing and business decision making. Topics include CRM history and evolution, database marketing, big data, customer lifetime value, predictive modeling, analytics, key performance indicators (KPIs), multichannel customer management, and CRM platform systems. Course content begins with the definition and overview of CRM, and then proceeds to detail the evolutionary trend from database management to the current use of big data and analytics in the multichannel environment. Students are expected to understand how data can be leveraged by marketers to quantify marketing results, forecast marketing goals, and realize marketing objectives. The course is divided into three sections: (1) Customer Centricity & Data Evolution; (2) Leveraging & Quantifying Data; and (3) CRM Management.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.420.730</b>			
	Advanced Behavioral Marketing	Marketing, in particular, begins and ends with the consumer – from determining consumer needs to ensuring customer satisfaction. In this advanced behavioral marketing course, we will explore classic as well as the most recent scientific research in marketing, psychology, and behavioral economics on judgment and decision-making. Readings will include primary empirical research articles, business journal articles, and research reviews. We will develop your ability to understand and influence what people want, how people decide what and when to buy, and whether people will be satisfied or dissatisfied with their decisions. These psychological insights are not only particularly useful for marketing management decision making such as target marketing, brand positioning and marketing communication, but also shed light on common decision biases beyond marketing. In addition, we will examine the methodology of behavioral research to build the tools you will need to interpret scientific findings and base decisions on them.	BU.410.620 or BU.911.610
		Credits: 2.00	
<b>BU.430.710</b>			

	Branding and Marketing Communications	A brand is a name, term, sign, symbol, or design—or a combination of these—intended to identify the goods and services of one seller or group of sellers, and to differentiate those of the competition. The essence of formulating competitive strategy is relating a brand to its environment. Although the relevant environment is very broad, encompassing social as well as economic forces, the key aspect of the brand’s environment is the industry(ies) in which it competes. Therefore, the goal of competitive strategy for a brand is to find a position in the industry where the brand can: 1) articulate a compelling value proposition, 2) defend itself against competitive forces, and 3) leverage communication resources to sell the brand message and build brand equity.	BU.410.620 or BU.911.610	
		In this course, students examine how a favorable brand and memorable brand experiences can influence a firm’s ability to withstand competitive pressures and thrive in dynamic market conditions. Students will study brand management from the consumer perspective to highlight the importance of customer perceptions in bringing brands to life and the role of brand knowledge in building brand equity. Students will become acquainted with cutting-edge frameworks, concepts, and tools that have been adopted across industries and around the globe to build lucrative brand franchises. Additionally, students will consider the role of marketing communication vehicles and platforms in effective brand management.		
		Credits: 2.00		
<b>BU.430.720</b>				
	Pricing Analysis	Pricing is one of the most important and least-understood business decisions. This course aims to equip students with proven concepts, techniques, and frameworks for assessing and formulating pricing strategies. The objective is to prepare students for addressing strategic and tactical pricing issues and identifying profit-boosting changes in pricing practices across a range of professional contexts – as product/service managers, business unit managers, management consultants, entrepreneurs and M&A advisors.  Credits: 2.00	(BU.410.620 or BU.911.610) and (BU.510.601 or BU.914.610)	
<b>BU.430.740</b>				

	Sales Force Management	A well-staffed sales function and full knowledge of sales force management is vital for business success. This course takes a close examination into sales force management strategies with a hands-on approach through simulation, role playing, case studies, readings, and interaction with marketing professionals who are engaged in the dynamics of sales force management.	BU.410.620 or BU.911.611	
		Credits: 2.00		
<b>BU.450.630</b>				
	Designing Experiments	Did a new compensation scheme motivate employees to work harder or stay with the organization longer? Do larger subsidies for health insurance lead to improved employee health and productivity? Did a new website format increase user activity on the site? Did a charitable organization's program to train community leaders lead to positive changes in the community? Cause and effect questions like these are crucial to developing evidence-based practice in business, nonprofits and governments. Yet answering these questions is difficult when new ideas are not implemented with the explicit intent of measuring their impacts. In other words, developing evidence requires a scientific approach to business and policy.	BU.510.601 or BU.914.610	

		<p>This class aims to teach students to develop empirical evidence about the best ways to achieve their aims, whether these aims are to increase profits or to address social problems. The use of randomized controlled trials to test program impacts is becoming increasingly popular in businesses and government. An employee estimated that the average Facebook user is a participant in about 10 randomized controlled trials at any point in time. The U.S. government recently created a “Nudge Squad” that works with federal agencies to test new ideas through randomized controlled field trials. Experiments are an integral part of the ‘big data’ revolution going on in business, nonprofits and government. Importantly, they do not require advanced statistics or powerful computers to implement and interpret.</p>	
		<p>The course will blend lectures, group discussions, readings, homework, a group project, and guest speakers from private industry, nonprofits and government agencies. I am a firm believer that the most fundamental principles can be stated in plain English, thus the course stresses intuition (in English) over math and mechanics. Nevertheless, there will be math and mechanics in the course.</p>	
		<p>Credits: 2.00</p>	
<b>BU.450.710</b>			

	Marketing Strategy	This course provides students an in-depth understanding of marketing strategy. It is designed to help students experience the role of senior business executives in formulating, implementing, and evaluating marketing strategies for a variety of complex, real-world business scenarios. Students will analyze and learn the key factors underlying the successful and lackluster marketing strategies of both major corporations and smaller firms across different industries, across different tiers of brands and products (luxury versus mass-market), and across the globe. Topics covered include industry and market analyses, dynamics of competition, value creation, branding, segmentation, targeting, positioning, product development, pricing, distribution, and promotion. Through case analyses, in-class discussions, course assignments, and a research project, students will develop skills in devising, executing, and evaluating marketing strategies, as well as working in teams on complex business projects.	BU.410.620 or BU.911.610
		Credits: 2.00	
<b>BU.450.730</b>			
	Design Leadership	This course offers students the opportunity to learn and participate in design thinking: a human-centered process utilized by some of the most creative and competitive business organizations. With emphases on research, ideation, and prototyping, design thinking helps students leverage their creativity and collective expertise to achieve innovative solutions. During this course, students will work in teams to solve complex problems while applying the entire design thinking process. A large component of the course is experiential, but students will examine design thinking through multiple academic lenses (design and design theory, organizational behavior, and social psychology).	No Prerequisite(s)

		Credits: 2.00		
<b>BU.450.740</b>				
	Retail Analytics	The retail and service sector is the largest of all economic activities and evolving rapidly in the age of big data and Artificial Intelligence. This course will leverage data-driven tools and theoretical models to analyze decisions of retail firms. We will cover a wide range of topics in strategic decisions in retailing: pricing, location, franchising, and omni-channel retailing. Using the real data in retailing, we will demonstrate and implement a wide range of statistical methods in econometrics and machine learning: single and multi-variate linear regressions, logistic regressions, classification trees, random forest, and multi-layer neural network. The focus is on predicting the effects of marketing decisions on profitability, although we will touch on causality as well. The questions this course will explore include:	BU.510.601 or BU.914.610 and BU.410.620	
		How is the landscape of retailing changing in the age of Artificial Intelligence and big data?		
		What is the right price and promotion in presence of competitors?		
		How should a retailer choose a store location?		
		How does omni-channel retailing influence the way shoppers move through all channels in their search and buying process?		
		Credits: 2.00		
<b>BU.450.750</b>				
	Strategic Market Intelligence	This course is focused on understanding advanced issues in marketing strategy and processes that determine marketing competitiveness in dynamic consumer and organizational markets. An important objective of the course is to teach students the skills of anticipating competitor's next marketing moves and incorporating them when setting own marketing strategies. Students will learn to apply game theoretic tools in various marketing contexts to understand the strategic implications of competitors' as well as their	BU.410.620 or BU.911.610.  (A basic understanding of microeconomics is recommended.)	

		own marketing decisions. Students will also learn strategies to help them make effective decisions when lacking important information and facing an uncertain market environment.	
		Credits: 2.00	
<b>BU.450.760</b>			
	Customer Analytics	This course introduces students to the modern practice of customer analytics. Its main goal is to illustrate how marketing practitioners can improve decision-making by leveraging scientific approaches in the analysis of big data. Leading analytical techniques and data structures are illustrated in the context of their most prominent applications. For example, predicting customer responses to marketing campaigns, and managing customer churn. The class has a strong “hands on” component, enabled by several in-class examples and group assignments (implemented on Microsoft Excel and the statistical language “R”). Students are not expected to become expert programmers or statisticians, but to acquire basic skills and knowledge to orchestrate an effective analytics strategy, given the firm’s goals.	(BU.510.601 or BU.914.610) and BU.410.620
		Credits: 2.00	
<b>BU.450.765</b>			

	Social Media Analytics	The rapid growth of social media has given consumers a powerful tool to create knowledge and propagate opinions. At the same time, social media has created an unprecedented opportunity for companies to engage in real-time interactions with consumers. In addition, the size and richness of social media data has provided companies an unusually deep reservoir of consumer insights to transform business and marketing operations. The social media analytics course will enable students to grasp the analytics tools to leverage social media data. The course will introduce tools such as engagement analytics, sentiment analysis, topic modeling, social network analysis, identification of influencers and evaluation of social media strategy. It will involve numerous hands-on exercises.	BU.510.601 and BU.410.620
		Credits: 2.00	
<b>BU.460.700</b>			
	Integrated Digital Marketing	Integrated Digital Marketing is a course designed to give the student an understanding of the digital marketing environment and how it functions. This course is intended to prepare students for the complexities and nuances of the digital world and provide them with foundational skill-sets that will translate into business value. The course will cover a wide spectrum of topics, including the history of the Internet, new and emerging digital trends, website design and development best practices, digital marketing campaign design, digital analytics, channel decision making, e-marketing research, digital positioning and branding, social network management, and digital messaging/creative best practices. Lectures, readings, case discussions and project assignments will offer both a digital agency management and an end-user perspective. Timely case studies, relevant text materials, digital marketing tools and group projects are used to augment the lectures and gain hands-on experience in the digital space.	BU.410.620 or BU.911.610

		Credits: 2.00		
<b>BU.460.710</b>				
	Business-to-Business Marketing and Channel Strategy	This course provides a managerial introduction to the strategic and tactical aspects of business marketing decisions and marketing channel strategy. Students examine the strategic concepts and tools that guide market selection, successful differentiation in business markets, and supply chain management. A mixture of lectures, discussions, cases, videos, and readings are used to examine how product and service decisions are designed to deliver the B2B value proposition, how pricing captures customer value, how value is communicated to and among customers, and how marketing channels are used to make this value accessible to target customers. Students will compare and contrast how the strategic and tactical processes of developing and managing value-generating relationships differ between B2B and B2C markets. Students will also gain understanding of how to manage channel power, conflict, and relationships.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.460.730</b>				

	New Product Development	While developing new products and services is vital to the growth to any company, it is also one of the most risky business decisions. This course examines the strategies and processes used by leading companies for successful new product development. Identifying consumers' pain points is the starting point. Practical techniques were introduced to navigate the processes of ideation, market analysis, new product development, and commercialization. Real-world examples were presented to showcase the applications of these concepts and techniques.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.475.601</b>				
	Foundations of Design Leadership	A rapidly changing market place demands leaders who must be intellectually dexterous and possess a range of skills and knowledge reflecting a multitude of creative disciplines. Foundations of Design Leadership surveys the language, tools, principles, and theories of the fields of design, engineering, and business as they apply to the generation of innovative design solutions. Focus is on a synthesis of design, technology, and business goals through the development of basic knowledge related to a range of topics including, aesthetics, ergonomics, finance, marketing, prototyping, creativity, accounting, manufacturing, economics, etc. Students with varied backgrounds representing the fields of business, engineering, and design, share their experience through seminars, lectures, and projects while gaining new knowledge about industries in which they have limited background. The goal of Foundations of Design Leadership is to establish a common set of knowledge among the programs diverse cohort.	No Prerequisite(s)	
		Credits: 3.00		
<b>BU.510.001</b>				
	Statistical Analysis Waiver Exam	This exam affords students the opportunity to confirm proficiency in Statistical Analysis. Students who successfully complete the waiver exam will be granted a waiver with replacement for BU.510.601.	No Prerequisite(s)	
		Please note: Waiver exams may only be taken once per student, in the first or second semester of registration in a new program. The exam will be completed online in Blackboard within the timeframe stipulated listed within this course description. Students will be required to use Remote Proctor for the actual completion of the exam.		

		Credits: 0.00		
<b>BU.510.601</b>				
	Statistical Analysis	Students learn statistical techniques for further study in business, economics, and finance. The course covers sampling distributions, probability, confidence intervals, hypothesis testing, regression and correlation, basic modeling, analysis of variance, and chi-square testing. The course emphasizes statistics to solve management problems. Case studies, spreadsheets, and Excel Add-in Data Analysis ToolPak computer software are used.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.510.650</b>				
	Data Analytics	This course prepares students to gather, describe, and analyze data, using advanced statistical tools to support operations, risk management, and responses to disruptions. Analysis is done targeting economic and financial decisions in complex systems that involve multiple partners. Topics include probability, statistics, hypothesis testing, regression, clustering, decision trees, and forecasting.	BU.510.601 or BU.914.610	
		Credits: 2.00		
<b>BU.520.601</b>				

	Business Analytics	This course discusses quantitative methods that have proven to be particularly useful for decision making in business settings. The course covers a variety of models and methodologies. While a number of software programs are available, the course will leverage the capabilities of Excel for a large number of topics. An emphasis will be placed on formulating problems, translating those formulations into useful models, optimizing and/or displaying the models, and interpreting results. The lessons of this course prepare students to perform the analysis required in subsequent courses and in practice. Topics such as Linear and Integer Linear Programming, Network Flow, Decision Analysis, and Monte Carlo Simulation will be discussed to demonstrate applications in planning and control for different types of business decisions.	BU.510.601	
		Credits: 2.00		
<b>BU.520.620</b>				
	Advanced Business Analytics	This course trains decision makers to function in the face of multi-dimensional uncertainty, through the development and use of optimization models. Mathematical abstractions are created which deal with issues including resource allocation, scheduling, pricing, and other responses to the realization of a variety of “known unknowns”. Topics include linear programming, dynamic programming, multi-criteria optimization, and non-linear optimization.	BU.520.601 or BU.913.610	
		Credits: 2.00		
<b>BU.520.650</b>				
	Data Visualization	This course prepares students to make informed decisions based on data using descriptive analytical techniques. Students will view examples from real-world business cases where data visualization helps the decision makers to visualize, discover, and decode the hidden information from within the data, and to exploit such information for making educated decisions. Topics include cognition and visual perception; design principles; fundamental charts; interactive visualizations; storytelling and dashboards; advanced visualizations methods for: temporal, spatial, networks, trees, textual, and high dimensional data; and advanced data visualization tools.	BU.510.650	

		Credits: 2.00		
<b>BU.520.710</b>				
	Big Data Machine Learning	This course provides students with a firm understanding of the mathematical and statistical theories that underlie the foundations of big data and machine learning. Students will be engaged in solving real-world problems by directly applying their data science skills through the implementation of code and rigorous analysis of financial data sets. In particular, this course will highlighted some of the challenges and limitations of applying such machine learning algorithms. Focus will be on understanding the subtle differences in each technique. This course will be hands-on with weekly homework assignments and a final presentation geared towards fully immersing students in the data science process. Students will program in Python (e.g. Pandas, NumPy, Scikit-Learn, Matplotlib, pattern, NLTK, etc.). Topics that will be covered include: Principle Components Analysis, Multinomial Logistic Regression, Naïve Bayes, Perceptron, Support Vector Machines, Random Forest, Neural Networks, model evaluation ROC/AUC, k-fold cross-validation, etc.	(BU.510.650 or BU.914.610) and (BU.231.620 or BU.910.611)	
		Credits: 2.00		
<b>BU.550.620</b>				

	The U.S. Health Care System: Past, Present, and Future	This course provides an overview of the health care delivery system in the United States, and explores the drivers of change over time that shape the organization and delivery of health care services and opportunities for innovation and improvements in the cost, quality, and access dimensions of health care services. The course considers the paradox of the U.S. health care delivery system, and how large expenditures on health care have not resulted in best outcomes due in part to issues of cost, access, and quality.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.555.710</b>			
	Applied and Behavioral Economics in Health Care	This course covers the application of economic theory to health care markets and decision-making. It explores the economic analysis of the health care industry across the continuum of care, including the role of non-profit and for-profit providers, the nature of competition, the effects of regulation and antitrust activity on hospitals, the effects of alternatives to hospital care and shifting of services between inpatient and outpatient settings and its effect on health care costs and quality. The course builds on analytical tools of economics applied to issues in health care to explore the use of economic incentives to influence health behavior, the role of asymmetric information and agency in health care, the role of decision-making biases as they apply to health care, the incentive implications of government as payer and regulator, issues surrounding equity and ethics, the role of health insurance in the economics of pricing, and the theory of the firm as it applies to physicians, hospitals, and systems.	BU.220.620 or BU.912.610
		Credits: 2.00	
<b>BU.610.625</b>			

	Simulation and Strategic Options	In this course we draw from Economics, Monte Carlo Simulation, and Decision Theory to build a framework for the assessment and control of quantifiable risks. In the process we introduce the logic of real options and analysis of contingent claims. From this base we cover several classic problems including retirement planning, insurance valuation, market entry, and product introductions. The unifying theme is the application of rigorous approaches to thinking through "optionality" in the real world as a means to manage risks.	(BU.231.620 or BU.910.611) and (BU.520.601 or BU.913.610)	
		Credits: 2.00		
<b>BU.610.630</b>				
	Pricing and Insuring Risk	This course will examine the way in which business and society make assessments of, control and transfer risk. Topics covered will include identification of risks, selection of strategies to manage those risks, implementation of selected strategies, management and monitoring results. Emphasis will be place on the use on insurance instruments in such strategies.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.610.705</b>				

	Crisis Management	In this course, we will examine the entire crisis management lifecycle – from prevention and preparedness through response, recovery, and mitigation – and consider the lifecycle’s principles and practices. We will identify and use the entire crisis management toolkit to address challenges faced by managers when organizations face any crisis, due to either external factors outside the organization’s control or internal control or strategic management failures. We will develop a complete crisis management plan, including tools and methods to identify potential crises, implement response and mitigation strategies to limit exposure, manage crisis response teams, and create communications to address stakeholder and public relation issues.	BU.120.601 or BU.930.610	
		Credits: 2.00		
<b>BU.610.730</b>				
	Contracting: Incentive Design and Analytics	This course explores fundamental drivers of human and system behavior embedded in business contracting, with a view integrating economical, operational, legal, and political perspectives. These drivers include alignment of incentives for performance and information sharing, provisions for recourse in the face of unsatisfactory performance, and design of options to facilitate the pursuit of opportunities that arise after contract terms are set. Emphasis will be placed on analyzing and designing contracts to create win-win opportunities and share or minimize risks in global networks.	BU.680.620 or BU.912.611	
		Credits: 2.00		
<b>BU.610.750</b>				
	Global Supply Chain Management	In this course, we show applications of inventory theory to global supply chain management. In addition, we discuss several related issues in supply chain management, including distribution, coordination, global sourcing and mass customization. We will take analytical and detailed approach in model development. The presentation is designed to refine intuitions developed from models and case studies to build managerial insights.	BU.680.620 or BU.912.611	
		Credits: 2.00		
<b>BU.680.620</b>				

	Operations Management	<p>Within a manufacturing or service organization, operations provide the power necessary for orchestrating technology and resources in creating products and services to meet the needs of end consumers. Operations management, accordingly, consists of ideas for shaping and innovating an organization's business model. This course provides a conceptual and actionable introduction to operations management and covers a wide range of topics, including operations strategy, process mapping and design, queuing theory, inventory management, lean manufacturing, and revenue management, unified by a thought framework known as "the operations prism" (flows, variability, and buffers). By taking a process view of value-added functions that lead to an understanding of how to make operations design choices, students will acquire analytical and strategic thinking skills crucial for managing 21st-century operations.</p>	BU.520.601 or BU.913.610
		Credits: 2.00	
<b>BU.881.700</b>			
	Health Care Overview Bootcamp	<p>This case-based course provides an overview of the strategic and policy challenges of delivering health care around the world, summarizing the philosophy, pedagogical approaches, and courses in the program. Over a two-week introductory period, discussions will focus on the 4 Managerial Skills (Sense Making, Problem Solving, Sense Giving, and Global Mindset) and 4 Strategic Pillars (Quality, Access, Cost, and Innovation) that leaders in the industry require to achieve the triple aim of high quality, efficiency, and optimal health outcomes.</p>	No Prerequisite(s)
		Credits: 0.00	
<b>BU.881.701</b>			

	Fundamentals of Health Care Systems	Ensuring comprehensive access to health services, improving the quality of care, and containing the growth of health care expenditures is a dynamic that exists in health systems around the world. This course provides an overview and synthesis of health systems in different countries, and the challenges and opportunities for developing and strengthening systems to maximize population health. Students learn about the four major models of health systems, systems thinking, management concepts relevant to the analysis of health systems, and performance of health systems. We analyze the health systems of five countries in detail. The strengths and weaknesses of these various national health systems—including macroeconomics, models of public financing, political economy, public choice, individuals/communities, and delivery infrastructure—are identified, evaluated, and discussed.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.881.702</b>			
	Frameworks for Analyzing Health Care Markets	This course introduces students to basic economic concepts and the language used to analyze market structure, conduct, and performance, as well as nonmonetary outcomes including health outcomes and distributional issues. Students learn to discuss system changes and challenges faced by health care providers and patients, facility managers, insurers, and product manufacturers. Lectures and cases explore the drivers of costs, prices, access, innovation, and outcomes.	No Prerequisite(s)

		Credits: 2.00		
<b>BU.881.703</b>				
	Health Care Law and Regulation	This course provides students with an overview of the legal environment as it affects medicine and business. Cutting-edge cases are utilized as students explore medical malpractice, negligence, and liability (physician, product, and corporate); criminal aspects of health care including fraud and abuse; patient consent and rights; and the current state of health care reform. This is the foundational course in the health services management curriculum.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.881.704</b>				
	Providers and Payers	This course focuses on strategies and tactics for provider networks and payers to manage resource constraints as well as insurance and reimbursement issues in order to deliver quality, ethical, and efficient care. Interactions between providers and payers are a critical topic, along with how these interactions lead to changes in health care provision and policy change.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.881.705</b>				

	Health Marketing and Access	This course focuses on how standard marketing techniques do, and do not, apply within the health sector, which poses several important constraints and challenges. Students explore the implications of these for marketing analysis, tactics, and strategy. We do so by reviewing existing applied work within the topic area of health care marketing and by leveraging students' experiences in this sector. The main topics covered include product, pricing, distribution and communications to patients, providers, and external stakeholders, such as regulators and nongovernmental organizations. Other topics of discussion include the role of marketing to encourage access; pricing as part of decisions on access; and the role of marketing communication to foster community health.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.881.706</b>			
	Health Innovation and Evaluation	This course focuses on emerging models of health care provision, including the role of information technology, mobile technologies, point of care diagnostics on a chip, health care at home, telemedicine, and technology-mediated innovations in health care for both consumers and providers. The course discusses various models of evaluation and how health care innovation is valued, funded, and commercialized.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.881.707</b>			

	Accounting for Decision Making in Health Care	This course offers an introduction to the most used tools and techniques of health care accounting, and financial management from a decisional perspective. It is intended to expose students to health care accounting theory, and practice, so as to enable enhanced decision-making at the executive level. The primary objective of this course is to impart financial, and managerial accounting knowledge required in managing contemporary health care organizations. The teaching approach will be to provide fundamental concepts of health care financial management, including both accounting and financial management principles with emphasis on the current financial environment in which providers operate. The course will be structured in a way accounting information could be interpreted, and applied to better understand operational efficiency, financial soundness, and strategic opportunity. Mobilization of financial statements, cost reports, and budgeting information will be articulated to support optimality of the managerial decision-making process. Case studies, and other real live anecdotes will be used to supplement concepts, and enhance comprehension.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.881.711</b>				
	Research and Policy Seminars in Health	These seminars — led by faculty experts from around the Johns Hopkins University such as the School of Medicine, Bloomberg School of Public Health, and School of Nursing — focus on current issues and cutting-edge research related to health care. Deliverables include a research paper on a topic approved by the instructor, and a reflection paper of a personal development plan for how the student will keep abreast of the field.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.883.701</b>				
	Fundamentals of Health Care Operations	This course focuses on designing, measuring, and improving processes that deliver care in both inpatient and outpatient settings. The course provides an introduction to process analysis, queuing theory, capacity management, cost measurement, and the metrics of process flow.	BU.816.610[C] or BU.557.720[C] or BU.680.620[C] or BU.912.611[C]	
		Credits: 2.00		
<b>BU.883.702</b>				

	Emerging Frontiers in Health Technologies and Strategies	This course examines health care organizations from the perspective of managing the information systems that exist within the enterprise. Identifying the clinical and health care delivery processes and how they relate to information systems is the main focus. The intent of the course is to identify key issues confronting the management of today's health care information systems and health care organizations, examine their causes, and develop reasonable solutions to these issues. Specific federal regulations, vendor solutions, and financial implications as they relate to health care information systems are also examined.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.883.703</b>			
	Medical Devices and Diagnostics	The goal of this course is to provide the latest market trends and industry analysis for products, services, and technologies in the medical device and diagnostics industry, as well as an assessment of market needs in the context of changing global demographics. The course discusses the barriers to and triggers for innovation with reference to the role of culture, regulation, cost effectiveness, and appropriate pricing. Students are introduced to medical device innovations across various geographic markets and industry sectors.	No Prerequisite(s)
		Credits: 2.00	
<b>BU.883.704</b>			
	Pharmaceutical Strategy	Based on an overview of scientific, clinical, legal, financial, strategic and ethical perspectives, this course focuses on new strategic developments in the pharmaceutical industry. Topics covered include business strategies in research and development, intellectual property, clinical trials and getting approval from regulatory bodies, pricing, reimbursement and marketing in the pharmaceutical industry. It explores fast evolving market models for innovation in the pharmaceutical industry in the context of changing global demographics.	No Prerequisite(s)
		This course assumes students have basic knowledge of the U.S. health care system through previous work or course experience and/or BU.550.620.	
		Credits: 2.00	

<b>BU.883.705</b>				
	Health Care Financing and Financial Management	<p>This course covers the analysis of the major financial decisions of corporations in the health care industry and application of techniques of corporate finance in the health care industry. Financial and operating decisions in the health care industry are discussed, as are the valuation of profitability and cost performance of service and product lines, the impact of cost containment and competition on hospitals and integrated delivery systems and other providers, modeling of cost drivers in health care including cost and production functions, cost accounting systems, and the concept of price and value. This course also covers managed care and risk management in relation to the relative roles of private sector and public sector insurance and providers, and the effect of delivery system design on cost, quality, and efficiency and equity. Topics related to the payment for the elderly, the poor, medically indigent, and the underinsured are also discussed. Finally, innovations such as insurance exchanges and changing models of employer self-insurance are explored.</p>	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.883.706</b>				

	Health Care Organization and Management	The overall goal of the course is to increase student effectiveness in understanding and managing individuals and teams. These tools are essential to improve operations and consumer outcomes. The specific aims of the course are to enable students to a) learn theories and concepts in organization behavior and health care management, b) integrate theories with real world situations, c) learn to understand perspectives and value of health care management, and d) develop the ability to work productively with diverse teams. Students will develop the knowledge and skills to analyze strategic issues in health care organizations. Topics that will be discussed include management styles, performance improvement, culture, change, and leadership. We will draw on several sources to meet the course objectives, including conceptual and experiential approaches, case studies, role plays, and exercises.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.883.707</b>				
	The Wire: Business Solutions for Community Health Improvement	This course provides students with the opportunity to study “business with humanity in mind” using Baltimore as a case study of the effects of the long-time economic decline of a city on the health status and quality of life of the people who live in it. We will study social determinants of health and focus on leadership and management strategies to effect change. The fundamentals of creating and managing non-profit (tax exempt) organizations is incorporated into the course work. Students will develop and assess the feasibility of an innovative solution to a health issue inspired by The Wire. In addition to the use of video as a text, students will read and discuss assigned articles and book chapters. Credits: 2.00	No Prerequisite(s)	
<b>BU.883.708</b>				
	Negotiation in Health Care Settings	Negotiating successful agreements in today’s health care environment presents a formidable challenge for health care professionals. In a world of managed care, hospital physician integration, and multi-institutional mergers, members of the health care profession are faced with creating agreement in which the	No Prerequisite(s)	

		<p>complex services of health care can be delivered in a coordinated and financially viable fashion. To meet this challenge, health care professionals must develop negotiating skills that can achieve mutually beneficial, value added agreements. This course will provide you with the basic knowledge and applied skills to negotiate in a wide array of health care settings. The first part of the course focuses on understanding and systematically preparing for, structuring, and executing increasingly complex negotiations involving administrators, insurers, patients and providers. The second part of the course extends these basic principles to variety of health care settings, including group negotiations, agency relationships, and conflict resolution.</p>		
		Credits: 2.00		
<b>BU.883.711</b>				
	Analysis of Health Care Operations	<p>This course expands on elements of Operations Management including process analysis, queuing theory, and process improvement to focus on nuances of the health care setting. It also used tools of statistical analysis and linear programming to consider performance metrics in the presence of variability or across multiple sites. Finally, it introduces new tools including Discrete Event Simulation as a way to gain insights into system performance.</p>	BU.520.601 or BU.913.610	
		Credits: 2.00		
<b>BU.890.711</b>				

	Health Policy Design and Implementation I	The Health Policy Design and Implementation Practicum consists of two courses, the Health Policy Toolkit and the Health Policy Project, that prepare students with an operational understanding of health policy and its role in health care delivery and population health. Students will enhance their portfolio of health policy expertise by completing: 1) A policy analysis brief on a compelling health policy issue and 2) A mentored health policy project with a health care provider or facility. The Health Policy Toolkit (Practicum I) provides students with a global contextual overview of US health policy goals, challenges, and initiatives as well as the frameworks, processes, and tools used by multi-sector actors through public, private, and market systems at the federal, state, and local jurisdictional levels. Students will prepare weekly policy memos and collaborate in conducting weekly health policy case labs focused on key public health and health care issues. Students will also complete individual health policy briefs on specific health policy issues of their own choosing.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.890.712</b>				
	Health Policy Design and Implementation II	The Health Policy Design & Implementation Practicum consist of two courses that prepare students with an operational understanding of health policy and its impact on health care delivery. The Health Policy Practicum provides students build on the Toolkit with experiential immersion in the operational processes of managing health policy in a public, nonprofit, or private agency or health care facility. During the 6-8-week internship, students report to work on a regular schedule, observe and shadow a manager or managerial team members acting as mentor(s), and contribute to the mission of the host organization by working on a health policy project selected and guided by the internship mentor.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.890.713</b>				
	Health Care Strategy Consulting Practicum I	This course is the first part of a two-part course. This course examines business strategies for health care industries and services. It prepares the student to assume the role of a consultant or decision maker in a complex organization who has to cope with tremendous complexity, uncertainty, and inadequate information. The focus throughout is on strategic management—the process of choosing and defining purposes and objectives, formulating and implementing a viable strategy, and monitoring strategic performance. Strategic tools such as SWOT, PESTLE, and Competitive Analysis are covered and practiced in-class on contemporary health care organizations' strategies. The emphasis is on the kinds of problems and issues that affect the success of the entire organization.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.890.714</b>				
	Client Consulting Practicum II / Health Care Strategy Consulting Practicum II	This course is the second part of a two-part course. Students enhance their business education by developing collaborative consulting engagements with businesses and nonprofit organizations in which students assist their client organizations in addressing existing and emerging challenges in the health care space. These clients may be domestic or international.	BU.890.713	
		Credits: 2.00		
<b>BU.890.715</b>				

	Health Services Improvement I	This course is the first of a two-part sequence. Students work with clients in the Baltimore/Washington, D.C. area to measurably improve the costs and quality aspects of their organization. The typical “real-world lab” for this project is a working facility within the Johns Hopkins medical system. While our efforts will evolve as we gather data and insight into actual operations, our focus will be on three interrelated sets of issues: physical flows, information flows, and cash flows. Physical flows include the movement of human assets such as medical staff and patients. Information flows involve data shared between agents via direct communication or via information systems. Cash flows include the assessment of cost savings and/or revenue enhancement projected to stem from project outcomes.	BU.883.711 or BU.883.701 or BU.680.620 or BU.912.611
		Credits: 2.00	
<b>BU.890.716</b>			
	Health Services Improvement II	This course is the second part of a two-part sequence. Students work with clinical clients in the Baltimore/Washington, D.C. area to measurably improve the costs and quality aspects of their organization. The typical “real-world lab” for this project is a working facility within the Johns Hopkins medical system. While our efforts will evolve as we gather data and insight into actual operations, our focus will be on three interrelated sets of issues: physical flows, information flows, and cash flows. Physical flows include the movement of human assets such as medical staff and patients. Information flows involve data shared between agents via direct communication or information systems. Cash flows include the assessment of cost savings and/or revenue enhancement projected to stem from project outcomes.	BU.890.715
		Credits: 2.00	
<b>BU.890.717</b>			

	Commercializing Biomedical Innovations I	This course is the second part of a two part course. This course teaches the process of bringing scientific discoveries to market. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage inventions to third parties for further development. Students work in small teams on early-stage invention projects that are patented or patent pending sourced by the instructor from university and government technology transfer offices. Students will analyze the feasibility of commercializing the invention so that it can be licensed to a third party that can pursue entrepreneurial funding and development.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.890.718</b>				
	Commercializing Biomedical Innovations II	This course is the second part of a two part course that teaches the process of bringing discoveries to market. Students are required to register for parts of the course. Students learn about innovation and invention processes, how to identify opportunities and assess when ideas are inventions, the steps required to bring the product to market, including intellectual property protection and regulatory processes, and strategies to license early stage invention to third parties that can pursue entrepreneurial funding and development. As part of the experiential learning process, students work in small teams on early-stage invention projects sourced by the instructor from university and government technology transfer offices.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.910.610</b>				
	Accounting Foundations	This course emphasizes the vocabulary, methods, and processes by which for-profit business transactions are communicated. Topics include the accounting cycle; basic business transactions involving assets, liabilities, equity, revenues, and expenses; and preparation and understanding of financial statements, including balance sheets, statements of income, and cash flows. The course also introduces the analysis of financial results and basic managerial accounting concepts and tools. This course prepares students for topics including capital budgeting, valuation and more advanced financial statement analysis courses.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.910.611</b>				
	Corporate Finance	This course studies corporate finance and capital markets, emphasizing the financial aspects of managerial decisions. The course touches on the major areas of finance, including the valuation of real and financial assets, risk and return, the Capital Asset Pricing Model (CAPM), optimal portfolio choice, estimating the cost of capital, capital structure, capital budgeting, the effects of leverage, and financial distress.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.911.610</b>				
	Marketing Management	This course covers principles of market-driven managerial decision making that determine competitiveness in dynamic consumer and organizational markets. Particular areas of emphasis include industry analyses, dynamics of competition, market segmentation, target marketing, channels of distribution, and product and pricing decisions. In-depth analytical skills are developed through case analyses, class discussions, and applied projects.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.912.610</b>				
	Competitive Strategy	This course requires students to assume the role of a general manager. General managers have to cope with tremendous complexity, uncertainty, and inadequate information. An important requirement of a general manager's job is the ability to think in a cross-functional and holistic manner. Creativity and innovation are critical to achieving success, and so is the ability to execute and manage day to day. The concepts and frameworks to be covered in this course include Porter's 5-forces Analysis, PEST Analysis, SWOT, emergent versus deliberate strategy, Resource-Based View of the Firm, Core Competencies and Dynamic Capabilities, Cost Leadership Strategies, Differentiation Strategies, Vertical Integration, Diversification, Cost Accounting, Business Process	BU.930.633	

		Management, Inventory Management, Newsvendor Problem, Value Chain Analysis, Activity-Based Accounting, and more.		
		Credits: 2.00		
<b>BU.912.611</b>				

	Operations Management	<p>Within a manufacturing or service organization, operations management's role is to orchestrate technology and resources in creating products and services to meet the needs of end consumers. Operations management, accordingly, consists of ideas for shaping and innovating an organization's business model. This course provides a conceptual and actionable introduction to operations management and covers a wide range of topics, including operations strategy, process mapping and design, queuing theory, inventory management, lean manufacturing, and revenue management, unified by a thought framework known as "the operations prism" (flows, variability, and buffers). By taking a process view of value-added functions that lead to an understanding of how to make operations design choices, students will acquire analytical and strategic thinking skills crucial for managing 21st-century operations.</p>	No Prerequisite(s)
		Credits: 2.00	
<b>BU.913.610</b>			
	Business Analytics	<p>This course lays the analytical foundation for modeling that supports many managerial decisions that entail tradeoffs among competing objectives. Building on concepts from Operations Research, Economics and Probability Theory, this course provides a basic introduction to a variety of resource allocation problems.</p>	BU.520.601
		Credits: 2.00	
<b>BU.913.611</b>			

	Judgement and Decision Making	The purpose of this course is to improve students' leadership capabilities through a critical examination of the organizational and psychological forces that guide human decision-making. Grounded in behavioral science and geared toward an understanding of decision-makers within organizations, topics in this course include heuristics and biases, Bayesian updating (taught with a behavioral lens), prediction accuracy, social and motivational influences on decisions, trust decisions, and expert intuition. The course culminates in a final project geared toward improving managers' judgment and decision-making.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.914.610</b>				
	Business Statistics	Students learn statistical techniques for further study in business, economics, and finance. The course covers descriptive statistics, probability, discrete and continuous random variables, estimation, hypothesis testing, and regression analysis. The course emphasizes statistics to solve management problems.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.930.610</b>				
	Effective Communication	This course prepares Innovation for Humanity (I4H) teams to communicate effectively with internal and external audiences. Students refine their skills by analyzing and practicing research-based strategies adopted by successful business professionals. In particular, students learn how to write compelling memos, develop executive presence, and deliver informative presentations.	No Prerequisite(s)	
		Credits: 1.00		

<b>BU.930.630</b>				
	Solving Organizational Problems	This course aims to equip GMBA Innovation for Humanity (I4H) teams with the fundamental knowledge and skills needed to thrive in their I4H projects and future organizational problem-solving endeavors. It differs from other management courses in its focus on the specific challenges faced by problem-solving teams (e.g., I4H teams) versus teams or individuals in other organizational settings (e.g., decision-making situations, organizational change efforts). It includes units intended to help students set up a problem-solving team for success, follow the iterative problem-solving process, adapt that process to manage scope and ambiguity, and both collect and evaluate the quality of problem-relevant evidence. Students will leave with foundational abilities needed to solve organizational problems.	No Prerequisite(s)	
		Credits: 1.00		
<b>BU.930.631</b>				
	Experiences in Leadership	The goal of this course is to help students translate research about individuals and groups into capabilities to become effective leaders. The course will provide students with analytical frameworks that will help them understand behavior in organizations, along with the practical experience to put that understanding into action. Key to developing this experience is using the classroom as a forum to apply knowledge and develop skills through immersive exercises, cases and interaction with practitioner experts.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.930.632</b>				
	Management and Organizational Behavior	The purpose of this course is to introduce students to fundamental topics related to managing, leading, and working in modern organizations. The course exposes students to a broad array of frameworks for understanding individual, team, and organizational behavior, with particular emphasis on the design of work, interpersonal dynamics, organizational innovation and change, global work environments, and crafting meaningful careers. This breadth of topics, ranging across organizational levels and career stages, distinguishes the course and is meant to complement students' later coursework focused on individual decision-making, solving problems in teams, and avoiding pitfalls of early career managers.	No Prerequisite(s)	
		Credits: 2.00		

<b>BU.930.633</b>				
	Business Microeconomics	This is a foundational 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 (competition, monopoly, and oligopoly), short- and long-run output/price decisions, and strategic interactions (game theory).	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.930.634</b>				
	Financial Valuation	This course provides comprehensive methods for valuing securities, projects, assets and firms. Notions and methods from corporate finance, corporate strategy, investments and financial statement analysis are employed extensively.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.932.610</b>				
	Ethical Leadership	In this course, students will be challenged to think critically about the ethics of organizational life. What is an organization's or leader's ethical obligation to the people they serve? How can ethics and pragmatism in business co-exist? And, why do individuals within organizations fall prey to unethical behavior? With cases and empirical research as a backdrop, this highly interactive seminar will challenge students to examine these and other fundamental questions, in an effort to cultivate the skills and dispositions that are required of an effective leader.	No Prerequisite(s)	
		Credits: 2.00		
<b>BU.940.610</b>				

	Innovation for Humanity Project	This experiential learning course is designed to develop agile and creative business leaders who understand how to build sustainable, impactful businesses within developing communities around the world. The course is consistent with the Carey Business School's signature theme of "teaching business with humanity in mind" and it provides an understanding of the needs of developing communities around the world. Students will work domestically and abroad engaging with entrepreneurs, public officials, faculty and NGOs, exploring critical development issues. Students will learn to understand the complex systems that prevail in the emerging economies, the role of appropriate technologies and interventions in solving pressing problems, and to recognize the sustainable business opportunities embedded in these community needs.	No Prerequisite(s)
		Credits: 0.00	
<b>BU.940.611</b>			
	Innovation for Humanity	This experiential learning course is designed to develop agile and creative business leaders who understand how to build sustainable, impactful businesses within developing communities around the world. The course is consistent with the Carey Business School's signature theme of "teaching business with humanity in mind" and it provides an understanding of the needs of developing communities around the world. Students will work domestically and abroad, engaging with entrepreneurs, public officials, faculty and NGOs, exploring critical development issues. Students will learn to understand the complex systems that prevail in the emerging economies, the role of appropriate technologies and interventions in solving pressing problems, and to recognize the sustainable business opportunities embedded in these community needs.	No Prerequisite(s)
		Credits: 4.00	