

GRADUATE STERN/NYU SHANGHAI DEGREE (SHBI-GB)

SHBI-GB 1000 Capstone Phase I (0 Credits)

Typically offered occasionally

The Capstone Project is a for-credit experiential learning course that integrates and weaves together concepts learned from the other constituent courses that comprise the curriculum and links them to practical applications. In small groups starting with pre-work during the Fall semester, students will work together to solve cases presented by companies.

Grading: Grad Stern Pass/Fail

Repeatable for additional credit: No

SHBI-GB 7100 Operations Management (1.5 Credits)

Typically offered Summer term

This course serves as an introduction to operations, viewed from the perspective of the general manager, rather than from that of the operations specialist. The coverage is very selective; the course concentrates on a small number of themes from the areas of operations management and information technology that have emerged as the central building blocks of world-class operations. It also presents a sample of key tools and techniques that have proven extremely useful. The topics covered are equally relevant to the manufacturing and service sectors.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7105 Business Communications (1.5 Credits)

Typically offered Summer term

Persuasive communication is a vital component to many aspects of business life. This course introduces the basics of communication strategy and persuasion: audience analysis, communicator credibility, and message construction and delivery. Written and oral presentation assignments derive from cases that focus on communication strategy. Students receive feedback to improve presentation effectiveness. Additional coaching is available for students who want to work on professional written communication.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7106 Mergers and Acquisitions (1.5 Credits)

Typically offered occasionally

This course analyzes the various modes of Mergers and Acquisitions (M&A) strategies to capture and create economic value. The objectives of the course are (1) to equip students with a set of quantitative and qualitative tools to assess the drivers and consequences of different types of M&As, and (2) to provide insight into the successful management of M&A process from conception, to execution and full integration. Students will benefit from insights from academic research and real life experience and will participate in case discussions illustrating the principles behind strategic decisions.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7116 Predictive Modeling Using R (1.5 Credits)

Typically offered occasionally

Predictive Modeling Using R

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7117 AI for Business and Finance (1.5 Credits)

Typically offered occasionally

This course aims to equip you with a strategic perspective, conceptual understanding, and practical tools to add value when applying AI to business and finance. To this end, we introduce an end-to-end AI business solution process with practical use cases, data, and code examples. By the end of this course, you will have learned: (1) How to translate business problems and challenges into data science and machine learning problems (2) How to source, evaluate, and combine data for your business and modeling objectives (3) How to implement and carry end to end AI projects by using state of the art algorithms and tools (4) How to evaluate and iterate your solutions based on the results (5) How to be successful with AI solutions in a real-world environment.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7118 Customer Insights: A Modern Approach with AI (1.5 Credits)

Typically offered January term

At the heart of every business is the customer. Without a customer, there is no business. This course will help you gain insight into what consumers want, why they buy, and what influences their choices. Understanding differences among consumers helps managers segment their markets and position their products and services effectively. You will be introduced to classic and contemporary data collection techniques such as focus groups, surveys, and experiments. You will learn to analyze qualitative and quantitative data and draw conclusions from your analyses to help guide important strategic and tactical decisions such as market selection, product design, digital and traditional media selection, advertising messages, and pricing.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7119 Consumer Behavior (1.5 Credits)

Typically offered occasionally

This course studies the consumer as a decision maker. It examines social and psychological influences on purchasing decisions, emphasizing their implications for marketing strategy. Topics include the consumer as a decision maker; motivation attitudes and their effect on behavior, information processing, consumer risk, and demographic, social, and cultural influences on purchasing behavior. Applications to advertising, product, and segmentation strategies as well as Web-based applications of consumer behavior are highlighted.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7120 Advertising Strategy (1.5 Credits)

Typically offered January term

This course covers the basic management principles of the advertising business. Students will learn how to develop, analyze, and invest in integrated communications programs. Classes will be a combination of textbook curriculum and real-world examples presented by advertising industry veterans from different disciplines. There will be particular emphasis on the role of advertising in a marketing plan, the promotional mix, strategy and positioning development, creative development, the evolving media landscape, the client agency relationship, and the overall future of the business.

Grading: Grad Stern Graded

Repeatable for additional credit: No

SHBI-GB 7121 The Strategist (1.5 Credits)*Typically offered occasionally*

The fundamental challenge facing the strategist is finding ways for a business to be different. For an existing organization, this means making it more distinctive relative to the competition. For a new business, this means creating an original position for it in the marketplace.

The challenge of being different is considerable, especially in a connected global economy where many players have access to the same information. In this environment, the key to being different becomes the ability to think differently—and better—than others. In this course, we will develop a four-way framework for thinking differently. The four components of the framework (4 C's) are: Strategy from Contrast, Strategy from Combination, Strategy from Constraint, and Strategy from Context. We will examine examples of strategies of each of these four types, and we will also use this framework to generate entirely new strategies.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7122 Causal Inference (1.5 Credits)***Typically offered occasionally*

Causal Inference course description: This course teaches statistical and experimental methods and tools for understanding the relationship between cause and effect. Topics include treatment effects, experiment design, A/B testing, instrumental variables, propensity score matching, panel data, difference-in-differences, and regression discontinuity.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7123 People & Organizational Analytics (1.5 Credits)***Typically offered January term*

This course familiarizes students with cutting edge analytic techniques for managing and assessing the flow of talent in organizations. The course starts off with a basic model of people movement in organizations and then unpacks this movement into stages, each with unique informational challenges and noisy data: recruiting, hiring, evaluating, developing, and retaining talent. For each stage, cutting edge analytic tools will be explored through lectures, class discussion, case analyses, and student hands-on use of both real and simulated data. The course then turns its attention to measuring and assessing the social network structures that shape interactions within organizations, and students will be given the opportunity to use modern network analysis tools and algorithms to analyze social networks in actual work settings. The course will conclude by focusing on measuring and assessing employee engagement and productivity, as well as macro organizational constructs such as organizational culture.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7124 Leading Change in Corporate and Family Business (1.5 Credits)***Typically offered January term*

Most companies around the world are controlled by their founders or founding families, including not only private firms but also more than half of all public corporations in the U.S. and more than two thirds of public corporations around the world. Family control raises unique challenges as well as value-creating opportunities for these companies and their various stakeholders. This course introduces students to the management, governance, and financial issues faced by family businesses and related organizations such as family offices and family foundations, and to the different career opportunities in and around them. The course addresses the questions: 1) How can growth in family businesses be managed given the demands for liquidity and control often placed on them by their shareholders? 2) What structures and mechanisms can be put in place to manage family dynamics in a productive way? 3) How can succession be managed to ensure continuity in family business systems? How can family ownership and control of the family business, and of family wealth, be transferred from one generation to another? The course is designed for students who may be involved with family enterprises in a variety of roles: as founders, as managers of a company owned by their family or controlled by another family; as advisors (investment bankers, investment managers, consultants, or board members); or as investors or business partners (family shareholders, joint-venture partners, private equity partners, and hedge funds). Students who want to pursue a general management, consulting, or finance career have a high probability of working at or with a family-controlled business. Whatever their future role, students will find it useful to understand the uniqueness of these companies, and why they may or may not want to be involved with them.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7127 Brand Strategy (1.5 Credits)***Typically offered occasionally*

Brand planners/strategists face many challenges, including how to a) create a comprehensive brand architecture that will provide strategic direction, b) Generate motivating brand identities and value propositions for the key brands, c) develop brand-building programs, and d) leverage new technologies. The goal of this course is to provide concepts, models, methods, and role models that will help address these challenges.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7128 Dynamics of Innovation (1.5 Credits)***Typically offered occasionally*

The purpose of this course is to expose you to the dynamics of industries driven by technological innovation and to train you to think strategically about technological innovation. In this course, we will tackle such questions as: How and why are dominant standards chosen in winner-take-all industries. How do firms choose among multiple attractive innovation projects? How do firms decide whether to go alone or collaborate and how do firms develop an effective collaboration strategy? How do firms make the difficult choice between protecting their technologies with patents or copyrights versus rapidly disseminating them to build installed bases and complementary goods? The course will be lecture case and discussion-based. Like the industries we will study the course will be fast-paced challenging and exciting.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7130 Professional Responsibility and Leadership (1.5 Credits)*Typically offered Fall and Spring*

Professional Responsibility and Leadership (PRL) is an interdisciplinary course that builds on prior coursework students have completed. In PRL, students pursue the following learning objectives: 1) to reflect on why they are embarking on a career in business, and how they intend to act as business professionals; 2) to think systematically about the risks and sources of resilience relevant to their professional lives; 3) to cultivate the habit of engaging in reflective dialogue with diverse stakeholders. The basic format of the course is a discussion seminar, drawing from three different sources: 1) the students' own personal experiences and values; 2) expert insights drawn from a variety of academic disciplines (including philosophy, literature, history, and art, as well as the natural and social sciences); and 3) relevant contemporary and historical business cases. PRL focuses primarily on the students' own interests, refining them through dialogue and in reference to expert sources.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7135 Teaming: The Art and Science of Collaboration (1.5 Credits)***Typically offered occasionally*

This course is aimed at improving student ability to develop and manage high performing teams through effective design and development. Topics include characteristics of high performing teams managing team composition monitoring stages of team growth developing strategies for effective group decision making developing a team focused organizational culture managing cross boundary collaboration managing cooperation and conflict within and across teams team leadership and evaluating and rewarding team performance. It also addresses how organizations can foster innovation strategic decision making and cross functional synergies through the use of teams. It emphasizes both theory and application skill building using a variety of teaching methods.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7140 Data Visualization (1.5 Credits)***Typically offered Summer term*

Data Visualization: With businesses generating and capturing increasing amounts of data, the ability to interpret and present insights in a persuasive way is more crucial now than ever before. Visualizing Data shows you how to make sense of your data, present clear evidence of your findings, and tell engaging stories all through data graphics.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7150 Generative AI: From Data to Business Workflow (1.5 Credits)***Typically offered occasionally*

This course explores the intersection of Generative AI (GenAI) with data analytics and business computing, focusing on how GenAI can be leveraged to solve complex business challenges in the era of big data. Through an exploration of fundamental business concepts such as the 'Job to Be Done', 'Value Proposition', and 'Product Market Fit', students will learn to integrate GenAI into various business scenarios effectively. The course is designed to equip students with the skills to critically evaluate the potential and limitations of GenAI, develop innovative solutions, and lead GenAI projects in diverse industries.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7160 Doing Business with China (1.5 Credits)***Typically offered January term*

In today's fast-changing world, doing business with China remains highly relevant due to its key position in global supply chains, large consumer markets, and powerful manufacturing capabilities. This dynamic graduate-level course explores in-depth the strategic, regulatory, economic, and cultural dimensions of doing business with China. Designed for future business leaders, this course equips students with the strategic insights and practical skills to navigate complex dynamics of China's business ecosystem and international landscape. Through real-world case studies of Chinese firms and their international partnerships, students will develop a nuanced understanding of the economic influence of Chinese firms and their approaches to cross-border collaboration, enabling them to build forward-looking strategies to address geopolitical and socio-economic challenges.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7170 Independent Study (1.5 Credits)***Typically offered occasionally*

Independent Study

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7300 Statistics & Data Analysis (3 Credits)***Typically offered Summer term*

This course is designed to achieve an understanding of fundamental notions of data presentation and data analysis and to use statistical thinking in the context of business problems. The course deals with modern methods of data exploration (designed to reveal unusual or problematic aspects of databases), the uses and abuses of the basic techniques of inference, and the use of regression as a tool for management and for financial analysis.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7301 Stochastic Modeling & Simulation (3 Credits)***Typically offered Summer term*

Stochastic modeling and simulation play an important role in making decisions related to the overall health of the firm. In this course we will develop both spreadsheet models and discrete event simulations to help firms predict the range of likely future scenarios that they may face and also to analyze the effects of decisions that they make. Data analysis on simulation outputs will also be taught. Applications covered in the course include the analysis of several investment opportunities, project management, inventory theory and the analysis of queueing models.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7302 Optimization Modeling (3 Credits)***Typically offered January term*

This course trains students to turn real-world problems into mathematical optimization models and to use such models to make better managerial decisions. Students will be introduced to the theory, algorithms, and applications of optimization. It covers both deterministic and stochastic optimization models. Students will develop and solve various models with optimization software. The application areas are diverse and they originate from problems in finance, marketing and operations. Topics covered: Linear and linear integer programming Network Flow Nonlinear programming Duality and sensitivity analysis Stochastic programming Robust optimization Dynamic programming SPRING 2024 (9 or 10.5 credits): NYU Shanghai

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7303 Foundations of Finance (3 Credits)*Typically offered Summer term*

This is a quantitative course introducing the fundamental principles of asset valuation within the framework of modern portfolio theory. The key analytical concepts are present value, option value, risk/diversification and arbitrage. These tools are used to value stocks, bonds, options, and other derivatives, with applications to the structure of financial markets, portfolio selection, and risk management.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7304 Dealing with Data and Introduction to Python Programming (3 Credits)***Typically offered Summer term*

This course provides an introduction to programming languages and to the software design methods. The programming language of choice is Python. However, the course will introduce the students to the fundamental programming concepts appearing in various other programming languages, including Java and C, that go well beyond the specifics of Python. Upon completion of this course, the students will be able to acquire practical programming skills in Python and understand the principles of structured software development. They will also understand the principles of designing large software systems and what it takes to plan, analyze, design, implement and support large Information Systems throughout their entire System Development Lifecycle.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7305 Corporate Finance (3 Credits)***Typically offered Summer term*

This course helps students develop an analytical framework for understanding how organizations make investment and financing decisions. Students also learn the theory and practice of various valuation techniques. There is an emphasis on understanding the theory and its applications to the real world as well as appreciating the limitations of the tools in practical settings. Specific topics include capital budgeting, investment decision rules, discounted cash flow valuation, real options, cost of capital, capital structure, dividend policy, and valuation methods such as WACC and APV.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7306 Debt Instruments & Markets (3 Credits)***Typically offered occasionally*

Covers the valuation of fixed income securities and investment strategies utilizing them. Topics include the mathematics of bond valuation, immunization, history of interest rate structures, varieties of debt instruments, default, and country risk considerations. The role of financial futures and options on bond portfolio strategies is analyzed, as well as more traditional approaches to debt portfolio strategies.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7307 Futures & Options (3 Credits)***Typically offered occasionally*

Covers derivative securities and markets. The primary focus is on financial futures and options, but there is also reference to the extensive markets in commodity market instruments. Topics include market institutions and trading practices; valuation models; hedging and risk management techniques; and the application of contingent claims analysis to contracts with option-type characteristics. The material is inherently more quantitative than in some other courses.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7308 Fundamentals of FinTech (3 Credits)***Typically offered Spring*

This class explores how FinTech changes the practice of risk management in financial firms. Risk management requires understanding, measuring, and managing market risk, credit risk, liquidity risk, and operational risk. The class presents the technology behind enterprise risk systems and shows how to manage risk using quantitative models. We consider how recent FinTech innovations such as Blockchains, mobile technologies, etc., can change the way these risk systems operate, and create a new demand for talents in risk departments. We also study the specific risk management and regulatory challenges faced by FinTech firms. The class has two main objectives. The first objective is to introduce the principles of risk management that anyone working for a financial firm needs to understand. The second objective is to discuss specific opportunities and challenges created by the use of new technologies in finance. Financial technology has gone through three major stages. In 1960s, back office paper based processes migrated to mainframe computers, using standard CUSIP's and equity clearing houses and depositories. The second stage used PCs, communications networks to address the front office, FIX standards brought online banking, trading and electronic markets. The third, and the subject of our class, is "fin-tech", where innovative use of technology disrupts existing financial processes and businesses.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7309 Chinese Financial Markets (3 Credits)***Typically offered occasionally*

This course introduces the institutions, instruments, and empirical regularities of China financial markets and the role these markets play in the broader Chinese economy. The goal of the course is to provide students with a comprehensive understanding of Chinese financial markets. It focuses on current issues and debates about Chinese financial markets, including the Chinese stock markets and bond markets, mutual fund and hedge fund industry, Chinese derivative markets, the Chinese banking system and other important topics. This course will not only cover fundamental information and knowledge about China financial markets, but also introduce frontier and concurrent research and applications.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7311 Machine Learning for Business (3 Credits)***Typically offered occasionally*

This course aims to be an introduction to applied machine learning, deep learning and their applications in business, especially in the area of marketing, finance, operations etc. The course will cover the current state of the art machine learning algorithms, such as ensemble learning for structured data, CNN (convolution neural networks) for computer vision problems, transformer models (BERT, GPT) for natural language processing problems, GANs (generative adversarial network) for style transfer and synthetic data generation, recommender system etc. While discussing the above topics, this course focuses more on an intuitive understanding of the concepts, hands-on practice, and business applications than the theoretical foundation behind these methods.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7312 Network Analytics (3 Credits)*Typically offered Spring*

This is a course on how the social, technological, and natural worlds are connected, and how the study of networks sheds light on these connections. The “social network” has captured popular imagination because of the spread of social media, however we have always been creatures of our networks—whether those networks involve family, villages, tribes, or Facebook. The topics we will cover include: social network structure and its effects on business and culture; understanding how the structural properties of networks help us understand social capital, power, ties and closure; the propagation through networks of information, fads and disease; power laws, network effects, and “rich-get-richer” phenomena; using networks for prediction; leveraging information networks for web search; networks and social revolutions, and the melding of economics, machine learning, and technology into new markets, such as “prediction markets” or markets for on-line advertisements.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7313 Advanced Portfolio Management (3 Credits)***Typically offered January term*

There has been a proliferation of new products and strategies in the asset management space in recent years, e.g., smart beta, alternative beta, fundamental indexing, low volatility, and leveraged and inverse ETFs. This course applies portfolio theory to understand and evaluate these products and strategies in the context of the empirical evidence about return patterns across assets (i.e., the factors such as value/growth, momentum, and carry that drive returns) in multiple markets/asset classes (e.g., US and international equities and bonds, currencies, and commodities). Key questions include: • What factors drive asset returns? Is it risk or mispricing? • Can this structure of returns be used to construct better portfolios and products? • How should the performance of existing products be evaluated given the empirical evidence?

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7314 Volatility Modeling (3 Credits)***Typically offered Spring*

The most fascinating aspect of financial market prices is how they change. The uncertainty or risk related to the size of changes in prices is referred to as financial volatility. Volatility can present significant investment risk, when correctly harnessed. It can generate solid returns for shrewd investors. It is also a tradable market instrument in itself. In this course, students will learn the basics of financial markets and then how to measure and forecast financial volatility. Students will become proficient with historical volatilities, exponential smoothing, ARCH/GARCH models, high frequency stochastic volatility models and implied volatilities from options. These tools will be applied to measuring risk, analyzing alternative approaches to calculating Value at Risk, measuring and forecasting correlations, solving the problem of dynamic portfolio selection, risk control and trading. Students will also learn how to use software to implement different models with real data from financial markets.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7315 Capstone Seminar (3 Credits)***Typically offered Spring*

The Capstone Project is a for-credit experiential learning course that integrates and weaves together concepts learned from the other constituent courses that comprise the curriculum and links them to practical applications. In small groups starting with pre-work during the Fall semester, students will work together to solve cases presented by companies.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7316 Revenue Management and Pricing (3 Credits)***Typically offered Spring*

Revenue Management and Pricing (RMP) focuses on how firms should manage their pricing and product availability policies across different selling channels in order to maximize performance and profitability. One of the best-known applications of PRM is yield management whereby airlines, hotels, and other companies seek to maximize operating contribution by dynamically managing capacity over time. Building on a combination of lectures and case studies the course develops a set of methodologies that students can use to identify and develop opportunities for revenue optimization in different business contexts, including the transportation and hospitality industries, retail, media and entertainment, financial services, health care and manufacturing, and others. The course places particular emphasis on discussing quantitative models needed to tackle a number of important business problems including capacity allocation, markdown management, dynamic pricing for e-commerce, customized pricing, and demand forecasts under market uncertainty, to name a few. Topics covered: Demand segmentation Price differentiation Constrained pricing Marginal value of capacity Network revenue management Pricing policies in action Demand forecasting and data analysis

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7317 Marketing Analytics (3 Credits)***Typically offered Fall and Spring*

This course aims to help students understand marketing innovations as well as develop and implement marketing innovations in the rapidly changing environment of technology, competition and consumer behavior. The focus is on how new information technology and data science have driven the innovations in marketing strategies, tactics and methodologies; and how they may change the future of marketing. The topics covered in the course include (but not limited to): (1) the theory of innovation and common approaches towards innovations in marketing, (2) marketing innovations and trends in consumer behavior, (3) innovations in marketing strategies and tactics with examples from U.S., China and around the world, (4) innovations in marketing research and analytics, (5) special topics on marketing innovations (e.g., big data and marketing innovations, mobile technology and marketing innovations, AI and marketing innovations, IoT and marketing innovations, smart retailing), etc.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7318 Deep Learning & AI (3 Credits)*Typically offered occasionally*

Description: This course provides a comprehensive introduction to the foundational concepts of Artificial Intelligence (AI) and their practical applications in business. Students will delve into key AI domains—including machine learning, deep learning, natural language processing (NLP), and reinforcement learning. Combining lectures, hands-on labs, and real-world case studies, the course equips students with the skills to design, implement, and critically evaluate AI-driven solutions to complex business challenges. By the end of the course, students will be able to bridge the gap between technical capabilities and strategic business objectives, enabling impactful and responsible AI integration in organizational settings.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7320 Marketing Management (3 Credits)***Typically offered Summer term*

This course examines challenges specific to entering international markets and conducting marketing operations on an international scale. Topics include identifying and evaluating opportunities worldwide, developing and adapting market strategies to specific national market needs and constraints, and devising and coordinating global marketing strategies. Emphasis is placed on strategic issues relating to international operations rather than on technical aspects of exporting and importing.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7321 Data-Driven Decision-Making (3 Credits)***Typically offered Summer term*

This course will change the way you think about data and its role in business. Businesses, governments, and individuals create massive collections of data as a byproduct of their activity. Increasingly, decision-makers and systems rely on intelligent technology to analyze data systematically to improve decision-making. In many cases, automating analytical and decision-making processes is necessary because of the volume of data and the speed with which new data are generated. We will examine how data analysis technologies can be used to improve decision-making. We will study the fundamental principles and techniques of data mining, and we will examine real-world examples and cases to place data-mining techniques in context, to develop data-analytic thinking, and to illustrate that proper application is as much an art as it is a science. In addition, we will work “hands-on” with data mining software. Topics covered: Data mining and data mining processes Introduction to predictive modeling Data fitting and over fitting Model testing Cross-validation and learning curves Model performance analytics Unsupervised learning and clustering Bayesian reasoning and text classification

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7322 Leadership in Organization (3 Credits)***Typically offered Summer term*

Organizations of all types face significant challenges. These include the difficulty of coping with highly dynamic business environments, the complexity of managing global enterprises, how to shape a healthy corporate culture managing politics and conflict between individuals and organizational units motivating a highly mobile and every changing workforce managing and harnessing intellectual capital and so on. Such challenges and how organizational leaders can deal with them are the subject of this course. The course has two major components. The first is “macro” in nature. It focuses on organizational level issues such as how an organization should be designed to best achieve its goals and how culture and control affect organizational dynamics. The second part is more “micro” in nature. It focuses on employee-related challenges such as how to get things done in politically sensitive environments evaluate and reward people and manage teams. The macro component is concerned with overall organizational performance while the micro component is concerned with managing individual and group effectiveness. And leadership is the linking pin that connects these two. This course will introduce you to central theories and frameworks in management and organizational behavior and will help you to understand how to apply those theories and frameworks to understand and address organizational challenges and problems. An understanding of organizations and their management is important for anyone who plans to work within an organization as career success hinges on one's ability to accurately read and respond to the organizational context within which one operates. The course will also give you an opportunity to reflect on the skills that are required for being a better manager and leader.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7323 The Strategic Landscape (3 Credits)***Typically offered Summer term*

This course studies two related issues. The first is how to gain advantage against competitors in the complex and dynamic global marketplace. Core business strategy themes include how to analyze the business environment assess resources and capabilities and choose competitive strategies. The second issue is how to create corporate value through configuring and coordinating multi-business activities. Core corporate strategy themes include analyzing scale and scope evaluating corporate competencies managing the multi-business corporation and choosing corporate strategies.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7324 Understanding and Managing Money Flows (3 Credits)***Typically offered Summer term*

This course provides students with a basic understanding of financial statements and the linkage between a firm's financial characteristics and its underlying long-term performance. Students will be introduced to basic financial and accounting concepts and will learn how to analyze financial spreadsheets to understand the underlying value drivers of performance. A focus will be on six key drivers: size, growth, margins, volume, business risk and financial risk. Students will analyze actual companies and present their results to the class. This course will provide a financial and accounting foundation for the rest of the program. No finance or accounting pre-requisites are assumed.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7325 New Business Venturing in China (3 Credits)*Typically offered Spring*

Are you interested in founding or joining a startup, or acting entrepreneurially within an organization? This class is designed to increase the chances of success by helping aspiring founders or employees identify and thus avoid a range of dilemmas all startups face. (By extension, aspiring investors and policy makers can also benefit from this class by learning what factors predict startup success.) To do so this class provides a broad introduction and overview of entrepreneurship based on a range of teaching methods including: academic research, cases, empirical data, videos, and guest speakers. Emphasis is devoted to "founder's dilemmas" that is, the consequential early decisions founders must make with minimal information. These include: deciding whether to found now or later; whether and how to form a founding team; splitting equity; tradeoffs associated with external investors; and weighing exit options. Note that this class is not an "incubator" (although you will receive substantial feedback on your business ideas). And while several components of this class are devoted to venture capital and the funding of startups, the treatment thereof is done primarily from the perspective of the entrepreneur. Primacy in this class is accorded the human and social capital aspects of entrepreneurship as opposed to those concerning financing.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7326 Retail Technology and Channel Management (3 Credits)***Typically offered occasionally*

The advances in AI, big data and mobile Internet technologies have been making profound impacts on modern retailing and marketing channel management, as evident by the increasing power of tech giants, such as Amazon and Alibaba, in the global retail industry. This course intends to survey key technologies adopted in the new retailing landscape and their strategic implications on marketing decisions and business models, with discussions on topics such as personalized targeting, search and recommendations algorithms and their applications, mobile technologies in retailing and channel management, customer loyalty programs and subscription-based retailing, selling through social media and livestream media, omni-channel management, Internet of things and channel management, managing e-commerce platform and its ecosystem, etc.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7327 Brand Strategy (3 Credits)***Typically offered occasionally*

Brand planners/strategists face many challenges, including how to a) create a comprehensive brand architecture that will provide strategic direction, b) Generate motivating brand identities and value propositions for the key brands, c) develop brand-building programs, and d) leverage new technologies. The goal of this course is to provide concepts, models, methods, and role models that will help address these challenges.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7328 Dynamics of Innovation (3 Credits)***Typically offered occasionally*

The purpose of this course is to expose you to the dynamics of industries driven by technological innovation and to train you to think strategically about technological innovation. In this course, we will tackle such questions as: How and why are dominant standards chosen in winner-take-all industries. How do firms choose among multiple attractive innovation projects? How do firms decide whether to go alone or collaborate and how do firms develop an effective collaboration strategy? How do firms make the difficult choice between protecting their technologies with patents or copyrights versus rapidly disseminating them to build installed bases and complementary goods? The course will be lecture case and discussion-based. Like the industries we will study the course will be fast-paced challenging and exciting.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7329 Innovation and Design Thinking (3 Credits)***Typically offered occasionally*

Innovation and Design Thinking

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7330 Managing Change in Organizations (3 Credits)***Typically offered occasionally*

Managing Change in Organizations

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7331 Pricing (3 Credits)***Typically offered occasionally*

Pricing is one of the most important but least understood marketing decisions. This course is designed to equip participants with the frameworks, techniques, and latest thinking on assessing and formulating pricing strategies. We will learn the process of making pricing decisions and explore innovative approaches for setting prices. The emphasis of the course is on ways in which you can help firms in diverse industries to improve their pricing. The topics of discussion include pricing of durable goods, pricing of consumer package goods, pricing of service, pricing of informational goods, new product pricing, price promotions, behavior-based pricing, price bundling, nonlinear pricing, targeted pricing, pricing through a distribution channel, and international pricing etc. Upon successful completion of this course, you will (a) gain a solid understanding of pricing practices across different industries, (b) learn state-of-the-art frameworks for analyzing pricing issues, and (c) master the essential techniques for making profitable pricing decisions with strategic thinking.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7332 Credit Risk (3 Credits)*Typically offered January term*

The objective of the course is to provide an understanding of single-name derivative products, primarily the single-name credit default swaps (CDS), and also index products, with a focus on sovereign CDS and index products. The objective is to provide a balance between developing, on one hand, a sound conceptual framework and, on the other, market understanding and insight, especially with respect to liquidity and counterparty risk effects that are often so important in markets from a practitioner's standpoint. We will use the Credit Default Swaps market to understand the Corporate, Sovereign, Sub-sovereign (Municipal) and Financial Sector Credit Risks, and their nexus, including the post-COVID developments.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7334 Digital Marketing (3 Credits)***Typically offered Spring*

This course focuses on enabling students to analyze and develop sophisticated interactive marketing programs. The primary objectives of this course are a) to introduce students to digital advertising and marketing theories and best practices in digital marketing and b) to give students the opportunity to apply this knowledge to building or improving the marketer's use of digital media. The course is designed to be a mix of strategic and tactical practice.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7335 Teaming: The Art and Science of Collaboration (3 Credits)***Typically offered occasionally*

This course is aimed at improving student ability to develop and manage high performing teams through effective design and development. Topics include characteristics of high performing teams managing team composition monitoring stages of team growth developing strategies for effective group decision making developing a team focused organizational culture managing cross boundary collaboration managing cooperation and conflict within and across teams team leadership and evaluating and rewarding team performance. It also addresses how organizations can foster innovation strategic decision making and cross functional synergies through the use of teams. It emphasizes both theory and application skill building using a variety of teaching methods.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7336 Conflict, Collaboration, and Negotiation (3 Credits)***Typically offered Summer term*

Successful managers know how to collaborate with other people effectively and how to resolve conflicts constructively. The goal of this course is to teach students the fundamentals of managing collaboration and conflict in one-on-one and small group settings. Our objective is to enhance students' interpersonal skills at their jobs. Drawing from the latest findings in managerial psychology, we cover the fundamentals of effective negotiation, communication, and persuasion. Special topics include getting buy-in, coping with resistance, and building coalitions.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7337 Advanced Strategy Analytics (3 Credits)***Typically offered occasionally*

This course focuses on significant, path-creating strategic decisions such as introducing a new product or process, responding to a crisis, or forming a strategic alliance. The goal is to understand both how decision makers should make these decisions, as well as how they do make those decisions. We examine how strategic, organizational, marketing, and operational perspectives can be used to carry out a quantitative and analytical analysis of strategy. This course revisits and goes deeper into concepts covered in Strategic Landscape, and brings out the nuance and complexity involved in evaluating and implementing these strategic decisions. This course targets those interested in strategic consulting opportunities, either for a consulting firm or as an internal consultant for a large firm. Many of the cases and decisions that we cover in the courses will be the types of projects and analysis that you will encounter as strategy consultants in the future. In addition, the course is also beneficial for those interested in financial research careers, assessing the rationales behind the key strategic decisions that firms make and how likely they are to be successful. We will learn how to do good research on the decisions of firms based on publicly available information.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7338 Special Situations – Creating Value in Distress, Restructuring, and Turnaround (3 Credits)***Typically offered occasionally*

This course intends to provide students with broad-based exposure to the world of financial distress, corporate restructuring, and turnaround management. It targets an audience interested in pursuing a career in private equity, hedge funds, investment banking, consulting, corporate leadership positions, and entrepreneurship.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7342 Causal Inference (3 Credits)***Typically offered occasionally*

Causal Inference course description: This course teaches statistical and experimental methods and tools for understanding the relationship between cause and effect. Topics include treatment effects, experiment design, A/B testing, instrumental variables, propensity score matching, panel data, difference-in-differences, and regression discontinuity.

Grading: Grad Stern Graded**Repeatable for additional credit:** No

SHBI-GB 7344 Leading Change in Corporate and Family Business (3 Credits)*Typically offered January term*

This comprehensive course is designed to equip students with the advanced knowledge and practical skills necessary to effectively lead and manage change within family businesses. Recognizing that family enterprises encounter unique challenges at the intersection of family dynamics and business operations, this course delves deeply into the complexities of change management in these contexts. Throughout the course, students will engage with both theoretical frameworks and practical applications of change management, specifically tailored for family business settings. We will utilize a variety of instructional methods, including in-depth case studies, collaborative group projects, and individual assignments. These elements are designed to foster critical thinking and facilitate a thorough understanding of the intricacies involved in leading change initiatives. Key topics will include: Theoretical foundations of change management Family dynamics and their influence on business decisions Strategies for effective communication and conflict resolution within family businesses Assessing organizational readiness for change Designing & implementing change initiatives that align with family values and business objectives By the end of the course, students will be well-prepared to spearhead change initiatives in family businesses, adeptly balancing the operational needs of the business with the values and expectations of the family. This holistic approach ensures that students gain a multifaceted perspective on leadership in the context of family enterprises, making them invaluable assets in any organizational setting.

Grading: Grad Stern Graded**Repeatable for additional credit:** No**SHBI-GB 7350 Generative AI: From Data to Business Workflow (3 Credits)***Typically offered occasionally*

This course explores the intersection of Generative AI (GenAI) with data analytics and business computing, focusing on how GenAI can be leveraged to solve complex business challenges in the era of big data. Through an exploration of fundamental business concepts such as the 'Job to Be Done', 'Value Proposition', and 'Product Market Fit', students will learn to integrate GenAI into various business scenarios effectively. The course is designed to equip students with the skills to critically evaluate the potential and limitations of GenAI, develop innovative solutions, and lead GenAI projects in diverse industries.

Grading: Grad Stern Graded**Repeatable for additional credit:** No