Olin Business School

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Courses

Courses include the following:

Accounting

ACCT 5002 Strategic Cost Analysis
This course focuses on both the accumulation and reporting of managerial accounting information and the use of that information for product costing, cost management, decision making, and the provision of incentives within the firm. The goal of this course will be on training you to be an effective user of managerial (especially cost) accounting information. However, due to the technical nature of the material, one cannot become an effective user of accounting information without a firm grasp of the fundamental mechanics involved in producing such information.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5003 Not-For-Profit Accounting
Students will gain an understanding of the unique facets of not-for-profit accounting, including understanding not-for-profit financial statements, differences in not-for-profit GAAP, and the IRS Form 990.
Credit 1.5 units.
Typical periods offered: Spring

ACCT 5004 Fraud Prevention and Internal Controls
This course is designed to provide students with an overview of various forms of fraud, the role of auditors and forensic accountants in detecting the fraud, and how internal controls may be designed to prevent such activity. The course will draw extensively on cases that illustrate the various types of fraud. In each topical area, students will examine the techniques that may enable an investigator to detect the fraudulent practices and also develop appropriate internal controls that would help a corporation minimize or prevent the fraudulent practices.
Credit 1.5 units.
Typical periods offered: Spring

ACCT 5005 Information Technology Control and Audit
This course is designed to provide students with an introduction and overview of the field of Information Technology (IT) Auditing. It is intended to provide students with an understanding of risks in the IT environment, general computer and application control concepts and the basics of how to perform an IT audit. The course will also introduce students to the ISACA COBIT framework and the concepts of IT governance and assurance.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5007 Analysis of Financial Institutions and Financial Instruments
The main goal of the course is to give you an in-depth understanding of how financial reports provide unusually accurate and detailed (but not perfect) information about the risks and performance of firms in the financial services industries. These firms' financial statements increasingly are based on fair value accounting and their financial reports typically include extensive risk and estimation sensitivity disclosures. Both fair value accounting and risk and estimation sensitivity disclosures are necessary ingredients for financial reports to convey the risk and performance of financial services firms in today's world of complex, structured, and risk-partitioning financial instruments and transactions. While financial services firms often apply fair value accounting and risk and estimation sensitivity disclosures imperfectly (or worse), careful joint analysis of the information they do provide invariably yields important clues about their risks and performance.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5008 International Financial Reporting Standards
The early part of this course will cover an overview of International Financial Reporting Standards and the International Accounting Standards Board; advantages and disadvantages of adopting IFRS from the viewpoints of users, preparers, auditors, developing countries, developed countries, and others. The course will also provide an overview of the SEC staff's findings and observations regarding certain issues in adopting IFRS in the United States and related observations from the perspective of the IFRS Foundation and staff. The remainder of the course will be devoted to the key differences between IFRS and GAAP in such areas as revenue recognition; inventories; and long-term assets, including property, plant, and equipment, intangible assets, research and development costs, borrowing costs, and impairment.
Credit 1.5 units.

ACCT 5011 Financial Accounting
Introduces the principal financial statements: balance sheet, income statement, and the statement of cash flows. Examines the distinction between income flows and cash flows. Presents selected accounting principles of measurement and reporting in the context of business and interpreting financial information. Extensive use of actual companies' financial statements.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5012 Strategic Cost Analysis
This course provides an introduction to cost concepts, cost behavior and cost systems. Understand how strategy, technology and the environment affect a firm's choice of cost system type and system design alternatives. Discuss how cost system choices, in turn, influence tactical and strategic managerial decision-making. Tools such as cost-volume-profitability analysis, customer profitability, value chain analysis and relevant-cost analysis are presented. Case discussions illustrate the application of course topics.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5013 Ethics I

This course has been designed to help the student understand ethical reasoning and behavior and in so doing define their own moral compass. The primary goal being to make the student a role model to others in ethical behavior - not just in determining what is the proper ethical choice, but, more importantly, effectively implementing the behavioral changes required to achieve solutions to ethical dilemmas. To quote while paraphrasing the authors of the textbook, we strive in (these courses) not only to educate accounting students to be future leaders in the accounting profession but to stimulate (the students) ethical perception and cultivate virtue thereby awakening (their) sense of duty and obligation to the public interest.

Credit 1.5 units.

Typical periods offered: Fall, Spring

ACCT 5014 Ethics II

This course builds on Ethical Decision Making in Accounting I to help students develop a deeper understanding of ethical behavior, including dealing with fraud in financial statements, legal obligations of auditors, Wall Street expectations and earnings management, and what it takes to be an ethical leader. To quote the author of the course text, ...it comes down to one's sense of right and wrong and willingness to voice values to positively impact (the) auditor responsibility. This second segment of Ethical Decision Making in Accounting is offered for the purpose of creating ethical leaders in the accounting and auditing profession, the business community, and society and to instill that sense of right and wrong and the eagerness to put it into action.

Credit 1.5 units.

Typical periods offered: Fall, Spring

ACCT 5015 Financial Metrics for Start-Ups

This course is designed for Masters of Accounting and Finance students (and others) who want to build their management consulting skills and competencies through work on real-world projects with early-stage businesses. Clients will be both Washington University-based entrepreneurs (students or recent alumni) and St. Louis community aspirants. Students may take this course twice in one semester, provided that they enroll in both ACCT 500K and ACCT 500O.

Credit 1.5 units.

Typical periods offered: Fall

ACCT 5016 Financial Accounting B

This course is the second in the Financial Accounting sequence. In this course we continue to explore how choices of accounting methods affect financial statements and financial ratios. Specifically we concentrate on long-term assets and long-term liabilities, purchase vs. leasing options, off-balance-sheet financing, and implications for deferred taxes. The course concludes with a closer look at the statement of cash flows and preliminary analysis of solvency. As in the first course, the emphasis is on reading and understanding of financial statements. We approach the statements mainly from a user's perspective. The course is structured as a mix of lectures and case discussions. It utilizes Harvard business cases and involves analysis of actual statements. Prerequisites: ACCT 5001 OR ACCT 5011. Note: Students cannot take both this course and ACCT 501 for credit.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5020 Managerial Control Systems

Organizations face both information and incentive problems, usually simultaneously. Managerial control involves developing policies and systems to cost-effectively minimize these problems while helping the organization achieve its objectives. The course focuses on control issues by analyzing the financial aspects of planning, feedback, and performance measurement. Topics include: responsibility accounting, budgeting, benchmarking, target costing, variance analysis, productivity measures, transfer pricing, and optimal design of performance measures.

Credit 1.5 units.

Typical periods offered: Spring, Summer

ACCT 5030 Business Analysis Using Financial Statements

This course uses concepts from financial accounting, finance, and strategy to develop models used by financial analysts in valuing equity securities (although we will focus on equity valuation, our approach is applicable to issues faced by managers considering investment opportunities). We will discuss/review a variety of models, including the dividend model, the free cash flow model, the method of comparables/ multiples, and the asset-based valuation model. These more traditional models will be contrasted with the residual income valuation model, a relatively recent valuation innovation.

Credit 1.5 units.

Typical periods offered: Fall, Spring, Summer

ACCT 5031 Advanced Business Analysis Using Financial Statements

This course involves the application of the analysis skills from ACCT 503 (accounting analysis, cash flow analysis, and financial ratio analysis) to a variety of reporting contexts. These include security analysis, credit analysis, valuation analysis, financial policy analysis, and investor communications. For this course, cases will be used as the primary vehicle for achieving the learning objectives.

Credit 1.5 units.

Typical periods offered: Fall, Spring, Summer

ACCT 5050 Advances in Management Accounting

This course focuses on current management accounting techniques, including activity-based costing, target and kaizen costing, international management accounting, and management accounting in Internet companies. Investigating these topics will include use of ABC software to illustrate the process of implementing an ABC information system. Also new in this course will be project focused on comparing and contrasting management accounting techniques of traditional and Internet companies. Prerequisite: ACCT 5002

Credit 1.5 units.

ACCT 5080 Financial Reporting From the Cfo's Perspective

This course will (1) enhance students' understanding of the role of the CFO (of publicly traded firms) in financial reporting and the related roles of the CFO in issues of corporate governance and investor relations, (2) provide students with a strong understanding of the impact of Sarbannes-Oxley on financial reporting for public companies, as well as requirements of the SEC in financial reporting, (3) develop students' skills in using the authoritative accounting and regulatory literatures when preparing financial reports, (4) examine issues related to financial reporting for specific accounting issues and in times of financial crisis, and (5) provide a basis of understanding the technological changes affecting financial reporting.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5090 Tax and Business Strategy: A Planning Approach
This course addresses tax planning in a business-centric context. The focus will be the economic role taxes play in structuring and planning business transactions involving various legal forms of doing business. The class materials will address current topics (e.g., mergers and acquisitions, changing global views of tax planning; tax reform implications) supplemented by real-world examples of transactions and issues facing business leaders today. Given the global expansion of business, particular attention will be made to the complexities faced when planning international investment, from the U.S. and into the U.S. Aspects relating to tax accounting (i.e., the interaction of tax planning and financial statements) will also be covered. The class will strive to not be tax technical (i.e., it will not involve a detailed review of the Internal Revenue Code or Regulations); however, due to the nature of the topic, there will be certain technical aspects that will be discussed so that participants can gain a better understanding of the interaction of the tax law with certain business transactions. The class will not focus on individual taxation topics.
Credit 1.5 units.
Typical periods offered: Fall, Spring

ACCT 5100 Introduction to Accounting
In this course, we will study the three fundamental financial accounting issues -- (1) recognition, (2) measurement/valuation, and (3) classification/disclosure -- and consider how business transactions are reflected on the financial statements using generally accepted accounting principles (GAAP). We will cover the four primary financial statements (balance sheet, income statement, statement of stockholders' equity, and statement of cash flows), the supporting footnotes to these statements, and several reports (annual reports, proxy statements, and press releases). The course incorporates both a preparer's perspective (i.e., GAAP requirements for recording and presenting financial information) and a user's perspective (i.e., how an investor or analyst can interpret and use financial statement information). The goal of the course is to prepare students for advanced course work in accounting and finance classes, beginning in the Fall A term.
Credit 0 units.
Typical periods offered: Fall, Spring, Summer

ACCT 5105 Financial Reporting & Assurance in a Blockchain World
Blockchain Technology has been described as the most important development in financial reporting since the emergence of double-entry bookkeeping. This course is designed to familiarize participants with Blockchain technology, and to explore the implications of Blockchain on the preparation and reliability of financial statements, as well as on the assurance process of financial statements. Many topics covered in this course may also be applicable to industries in which record keeping plays a prominent role (e.g. real estate transactions, recording health care information). This course is required for MS Analytics-Acct students.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5310 Financial Metrics
The Finance Metrics Clinic is designed for students who want to build their financial analysis and management consulting competencies through work with early-stage businesses. The end goal of these projects is to help startup clients understand and build their financial metrics-supporting more metrics/data-driven decision-making within the startup community.
Credit 1.5 units.
Typical periods offered: Fall

ACCT 5360 Financial Issues in Leasing
This course is devoted to studying the various elements that are involved in identifying leasing opportunities and structuring a lease. Topics to be covered include the legal and financial structure of a lease, options embedded in lease agreements, accounting and tax issues related to leases, and the marketing and negotiation of leases.
Credit 1.5 units.
Typical periods offered: Spring

ACCT 5550 Accounting Policy and Research
This course is designed for Students in the Masters in Accounting Program (MACC) and integrates material from previous accounting courses and professional experiences. This course will enable students to develop their knowledge and appreciation of current debates that surround the accounting profession. Students will develop critical thinking skills regarding these issues and form and defend opinions about contemporary regulatory and market issues. The course will also provide an opportunity for students to learn important technical and research tools used by accounting practitioners. Finally, students will get an appreciation of the primary methods underlying academic research in accounting.
Credit 3 units.
Typical periods offered: Fall, Spring

ACCT 5620 Financial Accounting II (Intermediate Acct)
Provides a more in-depth analysis of financial accounting and reporting issues than ACC 5600. Primary subject matter involves the issues of asset and liability valuation and income measurement. Topics include inventory accounting, valuation of long-term liabilities, and revenue and expense recognition. Also introduces the regulation of corporate accounting and reporting practices and their effects on users of financial statements.
Credit 3 units.
Typical periods offered: Fall, Spring, Summer

ACCT 5640 Auditing
This course deals with the professional service industry of auditing. The auditing industry provides the service of objectively obtaining, evaluating, and communicating evidence regarding managerial assertions about economic events. Specifically, auditing ascertains the degree of correspondence between managerial assertions and established criteria. The course is organized around the basic categories of: (1) the economic role of external corporate auditing in securities markets, (2) the composition of the firms in the auditing industry, (3) the regulatory environment of auditing, (4) litigation issues facing the accounting/auditing industry, and (5) the requirements for conducting audits. Topics included in the last area include a consideration of the scope and application of Generally Accepted Auditing Standards (GAAS) and the general technology of auditing which are some general auditing topics typically covered on the CPA exam. Grading is based on homework, a group-based project, and two exams.
Credit 3 units.
Typical periods offered: Fall, Spring

ACCT 5670 Taxation of Individuals
This course provides an introduction to federal income taxation with primary emphasis on the tax implications of business transactions. The objectives of the course are to develop a basic understanding of federal income tax laws and to provide a framework for integrating income tax planning into the decision-making process. The course is of value to all students who need to recognize the important tax consequences of many common business transactions and is not intended solely for accounting majors or those students interested in becoming tax specialists.

Credit 3 units.

Typical periods offered: Fall, Spring

ACCT 5675 Volunteer Income Tax Assistance

Students assist low-income members of the community in preparing their tax returns through the VITA program. The Internal Revenue Service provides training materials and an online certification program that must be successfully completed prior to engaging with clients. Students work with the Gateway EITC Community Coalition. Students who have taken ACCT 5670: Taxation of Individuals will be well positioned to do well in the VITA program.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5680 Financial Accounting III (Advanced Accounting)

Examination of the nature and financial reporting aspects of various business transactions: corporate acquisitions, mergers, and the formation of other strategic alliances. Topics: accounting for business combinations and consolidations, joint ventures and foreign currency translation, accounting and financial reporting issues facing government entities.

Credit 3 units.

Typical periods offered: Spring

ACCT 5700 International Financial Reporting Standards

The early part of this course will cover an overview of International Financial Reporting Standards and the International Accounting Standards Board; advantages and disadvantages of adopting IFRS from the viewpoints of users, preparers, auditors, developing countries, developed countries, and others. The course will also provide an overview of the SEC staff's findings and observations regarding certain issues in adopting IFRS in the United States and related observations from the perspective of the IFRS Foundation and staff. The remainder of the course will be devoted to the key differences between IFRS and GAAP in such areas as revenue recognition; inventories; and long-term assets, including property, plant, and equipment, intangible assets, research and development costs, borrowing costs, and impairment.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5701 International Financial Reporting Standards II

This course will be a continuation of ACCT 5700 and will be devoted to the key differences between IFRS and GAAP in such areas as provisions, contingent liabilities, and contingent assets; leases; income taxes; employee benefits; share-based payments; business combinations; consolidations and investments in related entities; financial instruments; cash flow statements; operating segments; interim financial reporting; accounting policies; changes in accounting estimates; errors; events after the balance sheet date; related party transactions; earnings per share; discontinued operations; and changes in foreign exchange rates. The course also will cover management opportunities and issues when converting from GAAP to IFRS.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5755 International Taxation

In today's global economy, questions regarding what activity and income get taxed and which jurisdiction enjoys taxing priority have never been more important. Recent U.S. tax reform has caused a monumental shift in the U.S. taxation of multinational transactions and activities. U.S. and global legislative proposals continue to focus on the tax rules applicable to multinational enterprises as parameters around these topics continue to evolve. This course will be an introduction to international taxation, focusing on such topics as tax jurisdiction, source-of-income rules, transfer pricing, tax treaties, and international tax practice and procedure. Core course materials will be supplemented with discussion around current relevant transactions (particularly M&A transactions) in the business headlines.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 5756 Advanced International Taxation

In today's global economy, questions regarding what activity and income get taxed and which jurisdiction enjoys taxing priority have never been more important. Recent U.S. tax reform has caused a monumental shift in the U.S. taxation of multinational transactions and activities. U.S. and global legislative proposals continue to focus on the tax rules applicable to multinational enterprises as parameters around these topics continue to evolve. This course will address advanced international taxation, focusing on such topics as foreign currency, export benefits, transfer pricing, tax treaties, as well as planning from both an outbound and inbound investment perspective.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 6503 Business Analysis Using Financial Statements

In this course we use concepts from financial accounting, finance, and strategy to develop models used by financial analysts in valuing equity securities (although we will focus on equity valuation, our approach is applicable to issues faced by managers considering investment opportunities). We will discuss/review a variety of models, including the dividend model, the free cash flow model, the method of comparables/multiples, and the asset-based valuation model. These more traditional models will be contrasted with the residual income valuation model, a relatively recent valuation innovation.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 6504 Advanced Business Analysis Using Financial Statements

This course involves the application of the analysis skills from ACCT 503 (accounting analysis, cash flow analysis, and financial ratio analysis) to a variety of reporting contexts. These include security analysis, credit analysis, valuation analysis, financial policy analysis, and investor communications. For this course, cases will be used as the primary vehicle for achieving the learning objectives.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 6536 Financial Accounting

This course will provide a comprehensive, graduate level introduction to accounting applicable to companies operating in the digital age. Along with ACCT 6537, it is designed to provide managerially oriented users of accounting with the foundational concepts, the underlying mechanics, and the overall perspective required to become effective users of accounting information. ACCT 6536 will be dedicated to understanding financial accounting information conveyed by companies operating in the digital age in their financial reports.

Credit 1.5 units.

Typical periods offered: Spring

ACCT 6537 Managerial Accounting

This course will provide a comprehensive, graduate level introduction to accounting applicable to companies operating in the digital age. Along with ACCT 6536, it is designed to provide managerially oriented users of accounting with the foundational concepts, the underlying mechanics, and the overall perspective required to become effective users of accounting information. ACCT 6537 will be dedicated to

understanding managerial accounting information used internally, particularly on understanding the role and importance of cost information in strategic decision making, business planning and controls in organizations.
Credit 1.5 units.
Typical periods offered: Spring

ACCT 6538 Creating and Protecting Value With IT Governance and Control
Creating and Protecting Value with IT Governance and Control is an essential course for current and future business leaders. This course will use new developments in IT to animate established frameworks, strategies, and best practices that ensure IT assets are managed effectively, risks are mitigated, and regulatory compliance is achieved. This is not a technical course, although you will benefit from what you already know about IT. In this course, you will gain insights into the practical aspects of implementing and managing IT governance and control within diverse organizational contexts. By the end of the course, you will be prepared to assess an organization's IT governance maturity, recommend improvements, and lead initiatives that enhance the strategic value of IT.
Credit 3 units.
Typical periods offered: Fall

ACCT 7600 Financial Accountability Metrics for Leaders
Cover the basic terms, concepts, and geography of financial statements including the balance sheet, income statement, statement of cash flows, and the statement of shareholders equity. Critically analyze financial metrics that company leaders are responsible for and that are used by constituents of those organizations (primarily investors). Discuss how and why leaders are accountable for delivering budgeted results and critically evaluate whether companies achieved expectations by conducting financial statement analysis. Map the role leader's play in the preparation of pro forma statements (forward-looking) and start-up business plans.
Credit 3 units.
Typical periods offered: Fall, Spring

ACCT 7610 Strategic Cost Analysis
In recent years the field of cost management has undergone profound changes. Organizations are using new business models and management tools such as e-commerce, activity-based management, value-based management, supply chain analytics, customer profitability profiles, big data, balanced scorecard, and economic value analysis to renew their strategies and to focus on how they serve their customers and stakeholders. The current thrusts of cost, quality, speed, and customer service in managing businesses and operations in super-competitive markets have placed new demands on management and accounting systems beyond the traditional role of product costing for financial reporting. This course has been designed to reflect these changing needs of the markets, management, and information systems.
In this course, my objective is: (i) to provide a balanced blend between theory, applications, and current practices; (ii) to discuss new concepts, developments, and research findings related to subject topics; and (iii) to highlight the importance of new developments in practice in the design, implementation, and use of effective strategic costing and control systems. We will study cost systems and their decision-facilitating aspects. We will examine the effects of strategy and the environment on cost system design and will provide a framework for evaluating alternative system designs. Finally, we will address common control issues through analysis of budgets, variances, and performance measures.
Credit 3 units.
Typical periods offered: Fall, Spring

ACCT 7630 Strategic Cost Accounting & Control
Studies the nature, design and decision-facilitating role of cost systems and focuses on the effects of strategy, technology and the environment on cost system designs. The course introduces basic cost concepts and develops techniques such as cost drivers, activity-based accounting, customer profitability, value-add and value chain analysis, and target costing. It analyzes the role of cost information for tactical and strategic decisions. Tools such as budgets, variance analysis, benchmarking, transfer pricing and balanced scorecard are used to illustrate planning, control and performance measurement systems that facilitate successful implementation of organizations' strategies.
Credit 3 units.
Typical periods offered: Fall, Spring

ACCT 8650 Special Topics in Accounting
The course covers classic topics in information economics, with the goal of students gaining a basic understanding of theories that govern empirical work in financial accounting research. Topics covered may include voluntary disclosure theory and contracting theory. The course is intimately connected to theoretical work that facilitates developing empirical frameworks, so it covers both theoretical and empirical work. However, the focus of this course is on the former.
Credit 3 units.
Typical periods offered: Spring

ACCT 8663 Seminar in Accounting Research II
The goal of this course is to develop the ability to conduct empirical research on (1) the role of accounting information in the firm (i.e., contracting and corporate governance), (2) how managers choose to exercise their discretion to implement their firms' financial accounting, reporting, and disclosure strategies. In doing so, we will develop an understanding of the economic, finance, and accounting theory that underlies empirical accounting research. As we go through each study in this class we will focus on identifying and understanding three critical elements of each study: (1) the research question, (2) the motivation, and (3) the research design. An author must describe the incremental contribution to the literature to motivate his paper. Therefore, we will also build an understanding of the major results in the literature and evaluate the strength and weakness of each study.
Credit 3 units.
Typical periods offered: Fall

ACCT 8664 Doctoral Seminar in Financial Accounting
For Doctoral students only
Credit 1.5 units.
Typical periods offered: Fall

ACCT 8665 Applied Empirical Research in Accounting
For Doctoral students only
Credit 3 units.
Typical periods offered: Spring

ACCT 8675 Topics in Corporate Finance
The general objective of this course is to teach and encourage students to explore interesting research questions in corporate finance and capital market accounting. We will work toward this goal by introducing students to several topics in empirical corporate finance and by exposing them to some current work. An emphasis will be put on the link between empirical and theoretical work and how to think about empirical research questions critically. Doctoral students only.
Credit 3 units.
Typical periods offered: Spring

Data Analytics

DAT 5410 Data Analytics for Business Leaders
This course introduces the statistical methods for the analysis of business and economic data. The role of probabilistic concepts such as independence, conditional probability, expectation, and variance as well as probability models such as Bernoulli, binomial, Poisson, and normal are examined. Particular emphasis is placed on topics that relate to model formulation, estimation of model parameters, hypothesis testing, and simple and multiple regression.
Credit 2 units.
Typical periods offered: Spring

DAT 5550 Machine Learning Tools for Prediction of Business Outcomes
Machine Learning deals with the algorithmic learning from data to predict the future. This course emphasizes data situations that students are likely to face in marketing, finance, manufacturing and consulting jobs. Students will analyze business datasets using various advanced analytic techniques such as logistic regression, decision trees, neural networks, random forest, stochastic gradient boosting, Ensembles, Clustering, etc. The focus of the course lies in the conversion of raw business data into robust actionable predictions for decision-making.
Credit 3 units.
Typical periods offered: Fall, Spring

DAT 5561 Introduction to Python and Data Science
This course is a 3-credit introduction course to data science in Python, which assumes no prior programming experience. The course is broken down into two units. In the first unit, students will be introduced to the basics of Python as a programming language. The second unit of the course is devoted to data analytics; students will use Python to explore and visualize real-world data sets from various industries, including finance, sports, and technology.
Credit 3 units.
Typical periods offered: Fall, Spring

DAT 5562 Text Mining
Consumers and companies constantly generate large amounts of unstructured or lightly structured texts on the web and offline: exchanges of consumer opinions on products and services on social media, transcripts of phone conversations with customer representatives, open-ended surveys, etc. By employing text analytics, businesses can derive at scale valuable insights into consumer attitudes to brands, competitive landscape, and customer relationships, among other applications. This course introduces students to the methods of mining, organizing, summarizing, and analyzing textual data with the objective of driving business decision-making. Prerequisites: DAT 500S and DAT 561.
Credit 1.5 units.
Typical periods offered: Fall, Spring

DAT 5563 Data Visualization for Business Insights
Data Visualization has become a core skill set to derive business insights in the data rich business world. Organizations are expecting Business Analysts and Managers to create and disseminate insightful visualizations about the business. This course teaches students the necessary skill set to create insightful visualizations using Tableau to understand patterns prevalent in large datasets which are otherwise difficult to comprehend. In particular, students will learn how to choose and create appropriate visualization based on the following three criteria: 1. Who's the audience looking at the visualization? 2. What is the nature of the business goal (Descriptive, Predictive, or Prescriptive)? 3. What is the data (Categorical, Numerical, Time Series, etc.)? The course will expose students to prevalent business applications of data visualization in different domains (Customer Analytics, Supply Chain Analytics, Healthcare Analytics, Financial Technology Analytics, Accounting Analytics, and Talent Analytics etc.). Upon completing this course, students will know how to create insightful dashboards and other visualizations for different audiences from the given data according to the specified goal.
Credit 1.5 units.
Typical periods offered: Fall, Spring

DAT 5564 Database Design and SQL
Databases are at the foundation of every organization's information strategy. Understanding the structure of databases and mastering the tools needed to analyze data are essential skills in any role. The tools developed in this course assist students with implementing a company's data management strategy and developing well-grounded analytical recommendations. In this course, we focus on understanding how data is structured in relational databases. With the vast amounts of data available from disparate sources, effective organization of the data is essential to its utilization. To complement this, we utilize Structured Query Language (SQL) as the primary tool to extract data for managerial reports and for advanced analytical models. Practical experience with current relational database software is developed throughout the course.
Credit 1.5 units.
Typical periods offered: Fall, Spring, Summer

DAT 5565 Deep Learning for Prediction of Business Outcomes
Deep learning has become a core skillset required to solve business problems in the unstructured, data-rich business world. Experts estimate approximately that 90% of the data in organizations is in the form of unstructured datasets, including images, texts, customer reviews, videos, and so on. Organizations would like to use these datasets to improve their business. Moreover, deep learning has a significant advantage over other machine learning algorithms in that it does not require extracting features manually prior to applying algorithms. Leading-edge organizations are also expecting business analysts and managers to be familiar with applying deep learning models to solve business problems using unstructured data. This course is recommended but is not required for MS-Business Analytics (MSA) students. It will teach students to build deep learning models for solving business problems using Python libraries (e.g., Keras, Tensorflow). We will cover a range of algorithms from neural networks foundations to convolutional and recurrent network structures; these will be applied in domains such as marketing, customer behavior, and predicting finance risks. Students will better understand the practical use of deep learning with the use of the following five questions: (1) How can unstructured datasets be visualized and analyzed? (2) What are neural networks, and how can they be optimized? (3) What is the deep learning model, and how can it be used in business? (4) Which deep learning structure should be used for a given business problem? (5) How can a deep learning model be developed to solve business problems? In summary, the course will expose students to prevalent business applications of deep learning in different domains (e.g., customer analytics, supply chain analytics, healthcare analytics, financial technology analytics, accounting analytics, talent analytics). Upon completing this course, students will know how to build and optimize deep learning models for different business applications.
Credit 1.5 units.
Typical periods offered: Fall, Spring

DAT 5566 Big Data and Cloud Computing
The growth in available data is a challenge to many companies. This presents an opportunity for companies to conquer the vast and various data available to them. The growth in data includes traditional structured data, as well as unstructured data created by both people and machines. It is essential for analysts to be comfortable in the new technologies and tools that are being developed to store, retrieve, analyze, and report, using the vast data resources available. This course introduces students to the technologies currently deployed to overcome the challenges of Big Data.
Credit 1.5 units.
Typical periods offered: Fall, Spring

DAT 5567 Prescriptive Analytics
This course covers the main types of optimization models - linear, integer, and non-linear programs - as they apply to decision-making in various business functional areas. Upon successful completion, students will demonstrate competency in formulating and solving optimization models of real-life complexity using state-of-the-art tools in Python alongside Excel's Solver. The course emphasizes proficiency in model-building and using software tools rather than theory.
Credit 1.5 units.
Typical periods offered: Fall

DAT 5569 A/B Testing in Business and Social Science
This course introduces students to causal methods that are used to measure the impact of business and policy decisions. The key insight of the course is that correlation does not imply causation and therefore cannot measure impact. In this course, students will learn about A/B testing and other causal methods as well as how to implement them in business, economic, and policy situations.
Credit 3 units.
Typical periods offered: Fall, Spring

DAT 5571 Introduction to Cybersecurity
This course covers a broad range of cybersecurity terms, definitions, perspectives, concepts, and current trends, with a focus on managing risk and the use of information and cybersecurity as business enablers. Students will complete a cybersecurity analytics-related project as part of the course work.
Credit 1.5 units.
Typical periods offered: Spring

DAT 5668 Deep Reinforcement Learning With Applications in Business
Deep reinforcement learning is an area of artificial intelligence that combines the fields of deep learning approach and reinforcement learning approach. It holds the capability to solve wide-ranging problems, especially in the area of sequential decision-making using various forms of unstructured data (including images, texts, customer reviews, videos, etc.). Deep reinforcement learning has been applied in resources management systems to optimize the distribution of limited resources such as warehouse space utilization and inventory management. Deep reinforcement learning techniques have also been used in finance to solve dynamic pricing problems. There is a growing trend for leading-edge organizations to expect business analysts and managers to be familiar with applying deep reinforcement learning techniques to solve business problems using unstructured data.
Credit 1.5 units.
Typical periods offered: Fall, Spring

DAT 6551 Strategic Decision Making With Data Analytics
This course combines data, statistical methods, and computation to gain insights and make useful inferences and predictions. This course will take a holistic approach to help you understand the critical elements of data science, from data collection and exploratory data analysis to modeling, evaluation, communication of results, and analysis. You will be discussing case studies, understanding the coding process, and hearing from industry experts to give you a hands-on experience with the data science process. Throughout the course, we will emphasize critical analytical thinking skills, data ethics, and data understanding. By the end of the course, you will be able to use data and reproducible data science methods to answer questions and guide decision-making with an emphasis on applications for a digitally-enabled world. The digitally enabled organization enjoys access to a plethora of data created from transactions, internal processes, interactions with customers and suppliers, and monitoring of digital and physical assets. Add to that data from government sources, competitors, and social media. This course provides students the skills to make data-driven decision from these varied sources.
Credit 1.5 units.
Typical periods offered: Spring

DAT 6561 Introduction to Python and Data Science
This course provides students the necessary skill set to extract reliable insights from large datasets prevalent in supply chain management. In this course, students will develop basic tools to acquire, clean, and analyze supply chain data, which they will then use to improve decision-making processes. Throughout the course, students will use the Python programming language, which is very effective for data manipulation, reporting, and complex optimization. Topics covered include current multi-source data collection technology used in supply chain management, how to transfer data into analyzable formats, how to generate static and interactive data visualizations to gain supply chain insights, and predictive analytics in supply chain management - with emphasis on machine learning models for demand forecasting and inventory management optimization.
Credit 3 units.
Typical periods offered: Fall

DAT 6563 Data Visualization for Business Insights
Data Visualization has become a core skill set to derive business insights in the data rich business world. Organizations are expecting Business Analysts and Managers to create and disseminate insightful visualizations about the business. This course teaches students the necessary skill set to create insightful visualizations using Tableau to understand patterns prevalent in large datasets which are otherwise difficult to comprehend. In particular, students will learn how to choose and create appropriate visualization based on the following three criteria: 1. Who's the audience looking at the visualization? 2. What is the nature of the business goal (Descriptive, Predictive, or Prescriptive)? 3. What is the data (Categorical, Numerical, Time Series, etc.)? The course will expose students to prevalent business applications of data visualization in different domains (Customer Analytics, Supply Chain Analytics, Healthcare Analytics, Financial Technology Analytics, Accounting Analytics, and Talent Analytics etc.). Upon completing this course, students will know how to create insightful dashboards and other visualizations for different audiences from the given data according to the specified goal.
Credit 1.5 units.
Typical periods offered: Fall

DAT 6569 A/B Testing in Business
This course introduces students to causal methods that are used to measure the impact of business and policy decisions. The key insight of the course is that correlation does not imply causation and therefore cannot measure impact. In this class, we will learn about A/B testing and other causal methods, as well as how to implement them in business, economic, and policy situations.
Credit 3 units.
Typical periods offered: Fall

DAT 6570 R and Statistics
The course will teach students to learn how to use R for making inferential statistical analysis, and modeling with R. The course will show the basic understanding of R programming. We will cover arithmetic and logical operators, vector operations, data structures, manipulating data, fundamentals of R programming (such as if statements, for loops, building functions, etc.), probability, and inferential statistical analysis. Students will learn R programming practically based on the following five questions: Understand fundamental syntax, control statements and functions in R; Apply R programming concepts through examples; Prepare the datasets in R for statistics and data analytics; Using R for making inferential statistics; How to use linear regression and modeling with R. In summary, the course will expose students to prevalent R programming by focusing on fundamentals, statistics, and data analytics. Upon completing this course, students will know how to use R programming.
Credit 1.5 units.
Typical periods offered: Fall

Finance

FIN 5017 Quantitative Risk Management
Risk management is an increasingly important, but often misunderstood, aspect of corporate financial policy. This course is designed to provide solid theoretical and technical foundations for financial risk management with applications to a variety of different industries and firms. Measures of risk, regulatory requirements for risk control, and risk management strategies employing derivative securities against market and credit risks will be analyzed. In addition, risk management methods and tools that are commonly used in practice will be introduced.
Credit 3 units.
Typical periods offered: Fall, Spring

FIN 5018 Topics in Quantitative Finance
The main objective of this course is to familiarize students with the current cutting-edge techniques implemented by the quantitative finance industry. The contents of this course can vary from year to year. Topics may include risk management, statistical arbitrage, and derivative pricing and hedging. Some practical projects may be used for implementation of these techniques. This course is only open to MSFQ students in their last semester and Financial Engineering majors who have taken ESE 427.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5019 CFAR Practicum
The CFAR Practicum provides consulting project opportunities for WAM, Fintech, Quant, and MBA Finance students. Students work in teams to complete a project with a company, developing sophistication in the transfer of cutting-edge financial techniques putting the academic environment into practice. Faculty advisors help teams manage the relationships with clients and make the bridge between the academic tools the students have learned and the practical projects provided by the companies. Students' grades are based on deliverables throughout the semester including the final presentation at the conclusion of the project. MSFC students can only take this course in their final semester by those who have not taken MGT 551E or MGT 501V. MBA students can take this course any semester after their first. Dropping this course after being introduced to a client may have an adverse impact on your ability to register for CEL courses in the future.
Credit 3 units.
Typical periods offered: Fall, Spring

FIN 5020 Financial Markets - Institutions, NYC Immersion
Examination of major financial institutions and markets in which they participate. Key institutions include corporate and investment banking, hedge funds, private equity firms, venture capital firms, fund management, and private wealth management. Markets covered include stocks and bonds, forex trading, and derivatives. Lectures by instructor set the stage for talks by practitioners in these institutions and markets. Emphasis placed on current trends and future prospects in each institutional area and markets in which they participate, and how these relate to the global economy, especially in context of global financial crises.
Credit 3 units.
Typical periods offered: Summer

FIN 5023 Venture Capital Methods
This course provides basic terminology and tools used in evaluation of early-stage venture investing. The course will also cover the history of venture capital and discuss the different strategies that a venture capital firm could utilize. The course will use case studies and outside speakers to provide overviews of certain aspects of the venture capital industry including investment strategies and VC firm operations.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5024 Venture Capital Practice
This capstone course offers students interested in early-stage investing an immersive experience in angel and early-stage investment practices within private companies. Collaborating with professionals in the St. Louis community, students engage in activities spanning from identifying potential investment opportunities to closing deals, gaining practical skills essential for the field.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5025 Private Equity - Methods
This course will provide the student with an understanding of the basic terminology, due diligence and analytical methodologies critical to evaluating Private Equity investments. The course will also cover the history of Private Equity and the different roles of Private Equity - growth capital, LBO/MBO, Roll-Up, etc. in the evolution of the firm. Private Equity funds in the context of the overall market (strategic vs. financial acquirers) will be discussed as will be the role of leveraged lending and bank financing of financial sponsors. Private Equity as an investment and its role in portfolio construction will be analyzed. Finally, the legal structure of Private Equity funds in the context of firm control and governance will be reviewed.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5026 Private Equity - Practice
This course is the capstone for students interested in pursuing careers in private equity. Students will develop practical skills for investing in private companies. Students will partner with professionals in the St. Louis community to perform various activities, including transaction sourcing, evaluating investment opportunities and, where appropriate, negotiating, arranging financing, and closing investments. The course also heavily relies on bringing in professionals from the local community to provide real-world perspectives on private equity investing.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5203 Financial Management
Students will learn in this class how the decisions of a company affect shareholder value and what decisions can increase it. To understand the perspectives of shareholders, we will study basic principles of investing: time value of money, valuation of debt and equity securities, discounted cash flow as a foundation for stock prices, the impacts of diversification and leverage on portfolio risk, the relationship between risk and expected return in securities markets, and capital market efficiency. We will use these principles to analyze capital investment decisions by estimating cash flows and discounting them at the appropriate cost of capital. We will also study how shareholder value is affected by a firm's financing decisions, such as the choice of using debt or equity capital.
Credit 3 units.
Typical periods offered: Fall

FIN 5232 Mergers & Acquisitions
This course focuses on identifying ways to increase firm value through mergers and acquisitions (M&A). We will survey the drivers of success and failure in M&A transactions, develop your skills in deal design, explore the deal process, and develop LBO and merger models similar to those used by investment bankers. Other topics addressed in the course are M&A regulation, the sell-side and buy-side M&A process, valuations, takeover strategies and antitakeover defenses, structuring of transactions to minimize tax consequences, the acquisition method of accounting, merger arbitrage, and auction vs negotiation sale processes.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5240 Options and Futures
Introduces the derivative markets with a focus on options and futures. Covers forward and futures pricing, and the use of futures contracts to hedge risk. Discusses option valuation primarily through binomial models.
Credit 1.5 units.
Typical periods offered: Fall, Spring, Summer

FIN 5241 Derivative Securities
Covers Black-Scholes option pricing model. Provides an in-depth analysis of valuation and trading strategies for options and other derivative securities. Potential applications could include hedging, swaps, index arbitrage, corporate decision making, and financial market innovation.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5250 Fixed Income Securities
his course analyzes investment in bonds and related fixed-income instruments. Major topics are bonds, interest rate risk, and derivative securities. Bond topics include interest rate compounding conventions, yield curves, and forward interest rates. Risk analysis covers duration, convexity, and immunization. Derivative securities are analyzed using an option-theoretic approach to valuing interest rate contingent claims. Prerequisites: FIN 5200 or FIN 5201 and 5202 and FIN 524 and 524B.
Credit 1.5 units.
Typical periods offered: Spring

FIN 5260 Risk Management
Risk management is an increasingly important, but often misunderstood, aspect of corporate financial policy. This course will analyze the whys and hows of financial risk management. The first half of the course will answer the question: Why should firms manage risk? The analysis will draw upon the theory of corporate finance to show how taxes, bankruptcy costs, and the costs of external finance can make risk management a value enhancing activity, and to understand the integration of risk management and corporate financial policy more generally. This underlying theory will be applied to the analysis of risk management issues in a variety of different industries and firms. The second half of the course will answer the question: How should firms manage risk? Risk management strategies employing exchange traded and over-the-counter derivatives such as futures, forwards, options, and swaps on fixed income securities, commodities, foreign currencies, and equities will be analyzed. If time permits, additional topics may be covered, potentially including credit risk, operational risk, settlement risk, and systemic risk. The course will include a rigorous analysis of the relevant theory, but will also emphasize application of this theory through classroom examples, homework problems, and cases.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5270 Financial Markets and Institutions
This course will facilitate further learning in the finance track by providing insights into various financial markets, financial institutions, associated market participants, select representative transactions and industry conventions. Students will examine the role of regulators, rating agencies, commercial and investment banks, and investors in the debt, equity and derivatives markets. In addition, in the context of the Financial Crisis, the role of regulation, monetary policy, leverage and human behavior will be discussed as possible root causes of the crisis with an emphasis on the various market failures in specific markets and their impact on market participants. Lastly, the role of revised regulations and the future of financial innovation will be debated.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5280 Investments Praxis
In this course students serve as managers of a portfolio, the Investment Praxis Fund, which is owned by the school. Students will analyze investment opportunities in various industries and present recommendations to the class for possible purchases or sales of securities. Students must demonstrate that their investment decisions are consistent with the style and objectives of the fund. Valuation tools, financial statement analysis and investment techniques are emphasized as part of a thorough analysis. The course will blend theory with practical advice from investment professionals such as portfolio managers, securities traders, and consultants.
Credit 3 units.
Typical periods offered: Fall, Spring

FIN 5300 International Finance
Measuring and hedging exposures to exchange rate fluctuations is a central topic of this course. The relationships among spot and forward exchange rates, interest rates, and inflation rates are described. Additional topics include capital budgeting for international projects, international capital markets, and international portfolio diversification. Students may not earn credit for this course and FIN 5480.
Credit 1.5 units.
Typical periods offered: Fall, Summer

FIN 5315 ESG Investing
The objective of this course is to help you develop a working knowledge of ESG investing, a new frontier in asset management. Topics covered will include a description of the environmental, social and governance characteristics of public companies, the regulatory environment and global trends in regulation, the stewardship and engagement functions, and the role of ESG integration in security selection and portfolio management. The coverage of topics will be supplemented with exercises involving use of information from MSCI, Sustainalytics and the Bloomberg information system.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5320 Investment Theory
This course covers the theory of risk and return in capital markets. Topics covered include the CAPM and factor models of asset pricing, measures of mutual fund performance evaluation, interest rates and fixed income securities.
Credit 1.5 units.
Typical periods offered: Fall, Spring, Summer

FIN 5321 Data Analysis for Investments
The objective is to obtain an in-depth understanding of some of the major empirical issues in investments and to gain the implementation skills. Based on recent advances, students are required to learn the facts, theories and the associated statistical tools to analyze financial data with Python, and with some optional tutorial and codes in R and Matlab. The topics include portfolio optimization, factor models, factor investing, Bayesian and shrinkage estimations, principal analysis, predictability, big data tools, asset allocation, stock screening, performance evaluation, anomalies, limits to arbitrage, behavioral finance, and Black-Litterman model.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5330 Valuing Strategic Corporate Investments
This is an applied course in capital budgeting under uncertainty and flexibility. Traditional NPV analysis assumes that corporate investments are now or never and that they are irreversible. However, most corporate projects have a great deal of flexibility in their timing, scale, etc. Our goal is to develop more advanced capital budgeting skills so that the student may attack real-world corporate investment decisions in a sophisticated way. There are five learning objectives: 1) Identification of optionality in corporate investments. Before we can apply option pricing theory to corporate decisions, we must be able to correctly characterize the optionality inherent in the projects we are considering. 2) Choosing the proper model for the analysis. The decision-maker's goal is to get the best possible approximation of the value of an opportunity given the constraints of time, cost, and information. Structured and carefully-defined problems allow for more precision. 3) Handling risk in the proper way through risk-neutral pricing. As we will demonstrate, the use of a risk-adjusted discount rate is not appropriate when valuing assets with optionality. We must proceed by risk-neutral valuation. 4) Understanding and handling the convenience yield issue. This is perhaps the most difficult issue to grasp, but it is vitally important to a sophisticated analysis. We must adjust our problem for the convenience yield or rate of return shortfall of an asset whenever there is an early exercise feature. 5) Clear presentation of analysis and results. The ability to construct a sophisticated capital-budgeting model is irrelevant if its structure and results cannot be communicated in a clear and convincing fashion. This is particularly important for real-option valuation, as most managers do not understand the issues of risk-neutralization and convenience yield. Furthermore, there are many that are skeptical of the assumptions required for a contingent-claims analysis. Their critiques must be addressed. Prerequisite: FIN 524 is a prerequisite; FIN 524B and FIN 534 are both highly recommended.
Credit 1.5 units.
Typical periods offered: Fall, Summer

FIN 5340 Advanced Corporate Finance I - Valuation
This course considers issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus is on assessing the profitability of different business alternatives in a forward-looking sense. The impact of financing decisions on the valuation of business alternatives is explicitly considered. Also covered is an introduction to measuring the role of flexibility inherent in business alternatives. The course is hands-on and heavily focuses on direct applications of the theory and the individual development of spreadsheet modeling skills. MBA/PMBA prerequisite: FIN 5203.
Credit 1.5 units.
Typical periods offered: Fall, Spring, Summer

FIN 5341 Advanced Corporate Finance II - Financing
The purpose of this course is to provide an understanding of the financing decisions made by corporations. While ACF I focused on firms' investment decisions, this course focuses on how firms fund those investments, how they raise capital, and how they return capital to investors. By the end of the course, you should be able to articulate how a variety of market frictions, including taxes, financial distress costs, asymmetric information, and agency conflicts, affect firms' financing decisions, and how these financing decisions interact with investment decisions. The course content is designed to balance theories, computations, and applications through a combination of lectures, case discussions, and practice problems.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5342 ACF3: Corporate Financial Strategy
ACF3 will introduce students to advanced topics in corporate finance. These include advanced topics in valuation, corporate governance, financing, risk management, and capital budgeting, among others. The specific topic will vary from year to year based on current business trends and faculty expertise. The course will introduce the latest research in the specific area and highlight applications through case analysis.
Credit 1.5 units.
Typical periods offered: Spring, Summer

FIN 5360 Financial Issues in Leasing
This course is devoted to studying the various elements that are involved in identifying leasing opportunities and structuring a lease. Topics to be covered include the legal and financial structure of a lease, options embedded in lease agreements, accounting and tax issues related to leases, and the marketing and negotiation of leases. PMBA Prerequisites: FIN core and ACCT 5001. MBA Prerequisites: FIN 5200 and ACCT 5011.
Credit 1.5 units.
Typical periods offered: Spring

FIN 5370 Advanced Derivative Securities
This course focuses on implementation of models for pricing and hedging derivative securities in the equity, currency, and fixed-income markets. Students will learn to write programs in a programming environment such as MATLAB to implement the Black-Scholes model, binomial models, Monte-Carlo methods and finite-difference methods. The derivatives studied will include exotic equity and currency derivatives and caps, floors and swaptions. The goals of the course are to learn more about the various instruments that are traded, the various assumptions and methods that may be chosen in modeling them, and the importance of the assumptions in determining the prices and hedges that are chosen. The course will be especially useful to students pursuing careers in sales and trading who will interact with research departments and students pursuing careers in asset management. Prerequisites: FIN 524 and 524B.
Credit 3 units.
Typical periods offered: Spring

FIN 5380 Stochastic Foundations for Finance
This is a foundations course, which is designed as a prerequisite to FIN 539, Mathematical Finance. It is therefore mainly designed for students in the Masters in Finance program who aim at quantitative positions in investment banks, hedge funds and consulting firms. While financial examples will be given, the primary focus will be on stochastic process and stochastic calculus theory. Students interested in applications of the theory are expected to take follow-on courses. Topics to be covered include: general probability theory; Brownian motion and diffusion processes; martingales; stochastic calculus including Ito's lemma; and jump processes.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5390 Mathematical Finance
This course focuses on continuous-time optimal portfolio choice and equilibrium asset pricing. Students will first learn how to solve optimal portfolio selection problems with both the Hamilton-Jacob-Bellman equation approach and the martingale approach. Then we will move on to solve for the equilibrium interest rate and expected return and volatility for stocks. The course is mainly designed for students in the Masters in Finance program who aim at quantitative positions in investment banks, hedge funds and consulting firms.
Credit 1.5 units.
Typical periods offered: Spring

FIN 5400 Special Topics: Real Estate Finance
This course provides a broad introduction to real estate finance and investments. Topics include both equity and debt. We begin with an overview of real estate markets in the United States. On the equity side students will be introduced to the fundamentals of real estate financial analysis, including pro forma analysis and cash flow models, and elements of mortgage financing and taxation. Ownership structures, including individual, corporate, partnerships and REITS will also be covered. On the debt side, we examine a number of financing tools in the context of the evolution of the secondary mortgage market, both residential and commercial. Those wishing to pursue more advanced topics in real estate finance could follow this course with Fixed Income and Mortgage-Backed Securities.
Credit 1.5 units.
Typical periods offered: Spring

FIN 5501 Legal, Compliance and Taxation Aspects of Wealth Management
The course will cover topics in law, compliance, risk management and taxation in wealth management at both the firm and client level. Topics covered include firm regulation; advisor compliance licensing and education; firm risk management; ethics; and taxation of client assets as relates to wealth planning and related firm services required. At the conclusion of this course students will understand the major management issues involved in running a wealth management firm, the obligations of an advisor and the major non-investment considerations for clients of wealth management firms.
Credit 1.5 units.
Typical periods offered: Spring

FIN 5502 Wealth Management - Practice
The course will help students to apply the many holistic concepts of Wealth Management by reviewing topics covered in previous courses, and emphasizing the importance of synthesizing, communicating and executing the various planning strategies used to meet the individual needs of clients. Students will be split into small groups; each group will receive a distinct client case study in the first class, and each group will develop a wealth management plan over the course of the semester to be presented to a hypothetical client in the last class. Every class will review planning topics including investment concepts, estate planning, tax management, insurance planning, retirement funding and education funding with a focus on practical application that will inform the recommendations in the wealth management plans.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5503 Endowments, Foundations and Philanthropy
The course will cover topics in endowment and foundation governance, grant making and investment management as well as fundamentals of philanthropic giving at both the foundation and personal levels. Topics covered include investment policy statements, spending policies, portfolio construction, giving priorities, socially-responsible/environmental-social-governance investing, impact investing, program related investments, and tax considerations.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5504 Hedge Fund Strategies
This course provides both an overview of hedge funds and an in-depth analysis of their trading strategies. Topics covered include structure, incentives, and performance evaluation of hedge funds, regulatory and taxation aspects of hedge funds, common trading strategies of hedge funds (e.g., market neutral, global macro, forex, activism, and event driven), and the academic evidence on the performance and influence of hedge funds.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5505 Behavioral Finance
The course will cover topics in behavioral finance, which is a field of finance applying psychology to decisions of investors and corporate managers. Topics covered include prospect theory and non-expected utility preferences, behavioral biases and heuristics, limits to arbitrage, anomalies and their behavioral explanations, bubbles ad their behavioral explanations, behavioral biases of individual vs. professional traders, and behavioral corporate finance. The course will cover theoretical aspects, empirical and experimental evidence, as well as practical implications.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5506 Fintech: Methods and Practice
This is a 3-credit course offered to MSBA students in the fintech track. The course will provide an overview of financial technology, and it will cover specific topics in this area, including data-driven credit modeling, cryptocurrencies, digital wallets and blockchains, smart contracts, robo advising, high-frequency trading, crowd funding, and peer-to-peer lending. The course will also discuss regulatory aspects of fintech, covering different methods as well as practical applications.
Credit 3 units.
Typical periods offered: Spring

FIN 5507 Seminar in Financial Technology
This is a 3 credit course offered to MSBA students in the FinTech track. The course will provide students with an opportunity to delve deep into one aspect of financial technology and write an extensive paper on this topic. The paper needs to include an analytical component and may be either a research paper analyzing data and testing some hypotheses related to financial technology or an in-depth case study of a FinTech company or technology and their implications. Other topics may also be considered with the instructor's approval.
Credit 3 units.
Typical periods offered: Fall

FIN 5520 Fixed Income Derivatives
This is an advanced course in fixed income, focusing on risk-neutral model-based pricing of fixed-income securities. We will cover both analytic and Monte Carlo pricing of various types of fixed-income derivatives, including caps/floors and swaptions in the context of key factor models of the swap term structure and LIBOR Market Model (LMM). Students will apply the theory in a practical group project by calibrating Bloomberg data to interest rate models. In addition, an introduction to the Local Volatility and Stochastic Volatility LMM (SABR) models and basic frameworks of structural and reduced form credit-risk models will be given. We will briefly consider how to use these models to price various types of exotic interest rate derivatives and credit-risky bonds and credit-default swaps commonly seen in practice. Practitioner-focused real-life applications and recent market developments (OIS, CVA) will also be discussed.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5550 Risk Management and Insurance
This course will provide an introduction to risk management and insurance. We will explore enterprise risk management broadly and understand what risk is, and how risk can be managed and or mitigated. We will understand the different kinds of risk and the difference between insurance and hedging. We will study the various insurance markets and the basics of how they operate. We will especially focus on the issues of risk management and insurance from an insurance issuer's perspective and from a corporate risk manager's perspective. We will also review the insurance operations of Berkshire Hathaway to understand the operations of a diversified insurance company and of Allstate Corporation and State Farm Insurance as we review the basics of auto and homeowners insurance respectively.
Credit 1.5 units.
Typical periods offered: Spring, Summer

FIN 5560 Quantitative Finance Projects
This course is offered to MSF students in the Quantitative Finance track, and it provides students with the opportunity to deeply delve into a topic in quantitative finance and write an extensive paper on the topic. Broadly speaking, topics include (but are not limited to) portfolio optimization; asset return forecasting; risk modeling; factor models of asset returns; derivative trading; and high-frequency trading. The paper must include an analytical component and may be one of the following: 1) a research paper analyzing data and testing hypotheses relating to quantitative finance and an in-depth case study of a company involved in quantitative finance; or 2) a paper on any other topic approved by the instructor. Students will work on projects in groups and will meet four times during the semester.
Credit 3 units.
Typical periods offered: Fall, Spring

FIN 5575 Introduction to Blockchain and Cryptocurrencies
Blockchain is a revolutionary technology that incorporates aspects of data science, economics, computer science, and law. The course allows students to obtain basic understanding of the blockchain technology and its applications to cryptocurrencies, smart contracts, and decentralized finance.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 5601 Research Methods in Finance
The course is designed to prepare students for independent research in finance by exploring methods and techniques in a manner that will allow the students to implement them correctly and efficiently. The curriculum will emphasize practical applications of empirical methods used in financial research and how to implement them. Students in the course will learn empirical methods in corporate finance and asset pricing; obtain basic knowledge and familiarity of the databases used in common finance research; get exposure to recent research in finance which applies the methods covered; and learn how to implement the methods covered using relevant programming languages.
Credit 3 units.
Typical periods offered: Fall, Spring

FIN 5901 Corporate Finance and Investments Industry Seminar
This course is designed to expose MBA students to the language, issues, and skill sets necessary for careers in corporate finance, investment banking, private equity and asset management. The primary intent of this course is to offer a detailed introduction to financial markets, as well as those people, companies and other institutions that participate in it as providers of capital, users of capital or the players that work to intermediate between these two.
Credit 0.5 units.
Typical periods offered: Fall, Spring

FIN 6522 Derivative Securities
Covers Black-Scholes option pricing model. Provides an in-depth analysis of valuation and trading strategies for options and other derivative securities. Potential applications could include hedging, swaps, index arbitrage, corporate decision making, and financial market innovation.
Credit 1.5 units.
Typical periods offered: Fall

FIN 6523 Mergers and Acquisitions
This course focuses on identifying ways to increase firm value through mergers and acquisitions (M&A). We will survey the drivers of success and failure in M&A transactions, develop your skills in deal design, explore the deal process, and develop LBO and merger models similar to those used by investment bankers. Other topics addressed in the course are M&A regulation, the sell-side and buy-side M&A process, valuations, takeover strategies and antitakeover defenses, structuring of transactions to minimize tax consequences, the acquisition method of accounting, merger arbitrage, and auction vs negotiation sale processes.
Credit 1.5 units.

Typical periods offered: Fall

FIN 6527 Financial Markets
This course will facilitate further learning in the finance track by providing insights into various financial markets, financial institutions, associated market participants, select representative transactions and industry conventions. Students will examine the role of regulators, rating agencies, commercial and investment banks, and investors in the debt, equity and derivatives markets. In addition, in the context of the Financial Crisis, the role of regulation, monetary policy, leverage and human behavior will be discussed as possible root causes of the crisis with an emphasis on the various market failures in specific markets and their impact on market participants. Lastly, the role of revised regulations and the future of financial innovation will be debated.
Credit 1.5 units.
Typical periods offered: Fall

FIN 6530 International Finance
Measuring and hedging exposures to exchange rate fluctuations is a central topic of this course. The relationships among spot and forward exchange rates, interest rates, and inflation rates are described. Additional topics include capital budgeting for international projects, international capital markets, and international portfolio diversification.
Credit 1.5 units.
Typical periods offered: Fall, Spring

FIN 6532 Investment Theory
This course covers the theory of risk and return in capital markets. Topics covered include the CAPM and factor models of asset pricing, measures of mutual fund performance evaluation, interest rates and fixed income securities.
Credit 1.5 units.
Typical periods offered: Spring

FIN 6534 Advanced Corporate Finance I - Valuation
This course considers issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus is on assessing the profitability of different business alternatives in a forward-looking sense. The impact of financing decisions on the valuation of business alternatives is explicitly considered. Also covered is an introduction to measuring the role of flexibility inherent in business alternatives. The course is hands-on and heavily focuses on direct applications of the theory and the individual development of spreadsheet modeling skills.
Credit 1.5 units.
Typical periods offered: Fall

FIN 6535 Advanced Corporate Finance II - Financing
The purpose of this course is to provide an understanding of the financing decisions made by corporations. While ACF I focused on firms' investment decisions, this course focuses on how firms fund those investments, how they raise capital, and how they return capital to investors. By the end of the course, you should be able to articulate how a variety of market frictions, including taxes, financial distress costs, asymmetric information, and agency conflicts, affect firms' financing decisions, and how these financing decisions interact with investment decisions. The course content is designed to balance theories, computations, and applications through a combination of lectures, case discussions, and practice problems.
Credit 1.5 units.
Typical periods offered: Fall

FIN 7400 Corporate Finance
In this course, we will examine the financial analysis of projects. There are three principal questions we will answer in the course: What are cash flows? How do you discount cash flows? What is the cost of capital? To answer the first question, the course will include a brief study of financial planning. In answering the second question, we will learn time-value-of-money calculations and simple models for valuing bonds and stocks. The cost of capital is an opportunity cost -- by what shareholders lose by not investing the funds themselves. The company creates value for shareholders if it earns more on investments than shareholders could earn themselves on investments of comparable risk. To understand what comparable risk means, we will study the theory of investments. We will also look at the financing options available to companies and examine whether and how a company can lower its cost of capital and create value for shareholders through its financing choices.
Credit 3 units.
Typical periods offered: Fall

FIN 7410 Growth, Valuation and Sustainability
This theme is about sustainable economic growth that creates value. It is divided into two components, growth and sustainability, that are linked. In the growth component, you will be introduced to the Competing Values framework, considered one of the 40 most important business frameworks of all time. This framework will then be used to develop various concepts related to formulating a sustainable growth strategy and will include in-depth development of your financial valuation skills. The first component will end with a discussion of creativity and innovation and organizational higher purpose, which will serve as the "connectors" for the second component, sustainability. The sustainability component of this theme explores the interplay and potential conflicts between environmental and corporate social responsibility driven approaches/initiatives and the growth imperative that underlies most business entities. Sustainability is tied directly to the Competing Values Framework to show how creative sustainability thinking and innovation, driven by an understanding of the social purpose of business, can potentially foster shared value creation in the near and long term. The component will illustrate the role of both internal values-driven practices and external social process in fostering new product and practices innovations.
Credit 3 units.
Typical periods offered: Spring, Summer

FIN 7480 Valuation, Mergers and Acquisitions
This course considers issues faced by corporate financial managers with respect to the valuation of projects, divisions, and entire companies. The prime focus is on assessing the profitability of different business alternatives in a forward-looking sense. The course is "hands-on" and heavily focuses on direct applications of the valuation tools used by managers, particularly in the context of mergers and acquisitions. Topics covered will include the cost of capital and various valuation techniques, including discounted cash flows (DCF) with WACC and multiples.
Credit 3 units.
Typical periods offered: Fall

FIN 7550 Growth
Credit 3 units.
Typical periods offered: Spring

FIN 7560 Valuation & Growth
Provides strategic and financial tools for evaluating, creating, and capturing market value through organic growth as well as through mergers or acquisitions. Enables you to form the right teams to promote growth. This theme combines: formulation of corporate

growth strategy, strategic assessment of growth options, an assessment of corporate culture, and the financial valuation of potential targets. This combination, along with the linking of strategy to the higher purpose of the organization, leads to a holistic framework that blends organizational values and date-based decision making. The discussion of personal and organizational higher purpose will also connect this theme to leadership development in other parts of the program.
Credit 1.5 units.
Typical periods offered: Fall

FIN 7580 Global Finance
This course deals with global financial markets, banking, and supply chains. These are essential components of both the financial system and the real sector, and an understanding of these is crucial for an appreciation of how resources are allocated in the economy, how the financial system facilitates this resource allocation and the management of the attendant risks, and how organizations use this to enhance global supply chains to move products and services to their customers. Thus, this course connects the financial system to the real economy. It focuses on data-driven decision making for managing global risks and opportunities by using tools like securitization, and it also considers how enterprise risk management can be used to facilitate the management of interconnected organizational risks. Essential components of this are the risk-management culture of the organization and the associated organizational values.
Credit 1.5 units.
Typical periods offered: Fall

FIN 8615 Research in Finance 1
The finance group has a very active seminar series in which we bring about 25 scholars to Olin each year (including job market candidates). The “Research in Finance” course meets once a week for 45 minutes prior to the seminar. The students are asked to read the seminar paper in advance and be ready to discuss different aspects of the paper. Additionally, one student is designated each week as the presenter of the paper. This student presents the questions, methodology, and results in the paper. The presenting student also discusses the main problems that he/she sees in the paper as well as ideas for further research. Following/during the presentation - the class will discuss these different aspects of the paper. Students write and submit a critical report on the paper under consideration including ideas for further research. The report is graded by the instructor.
Credit 1.5 units.
Typical periods offered: Fall

FIN 8616 Research in Finance II
The course goal is to improve your skills for analyzing, presenting, and conducting research in finance. The course consists of class presentations and discussions. Each week, we either study the seminar paper presented that week or your own research paper or proposal, according to the schedule listed in your course syllabus.
Credit 1.5 units.
Typical periods offered: Spring

FIN 8620 Empirical Methods in Finance
This course will provide students with an introduction to the commonly employed tools in empirical corporate finance. The course will be application oriented, and it will discuss the application of tools in different corporate finance contexts. Doctoral students only.
Credit 3 units.
Typical periods offered: Spring

FIN 8642 Advanced Continuous Time Finance
Covers advanced dynamic asset pricing and portfolio selection in continuous time. Students are required to read some of the classical papers as well as the most recent developments in the field. Lectures emphasize the concepts and technical tools needed to understand these articles and to initiate frontier research in this field.
Credit 1.5 units.
Typical periods offered: Spring

FIN 8643 Information Economics & Corporate Finance Theory
This is a rigorous seminar in individual and corporate economic behavior under conditions of asymmetric information, with application to corporate finance, financial intermediation and accounting. Its purpose is to cover many of the landmark modern developments in information economics as well as some “applications-oriented” papers. The principal objectives are: (i) inform students about the major advances made in the areas mentioned above and (ii) equip them with the analytical tools needed to do theoretical research in the area, including applications in financial economics.
Credit 3 units.
Typical periods offered: Spring

FIN 8644 Financial Economics I
Credit 3 units.

FIN 8649 Directed Readings in Finance
Credit 3 units.
Typical periods offered: Fall, Spring, Summer

FIN 8652 Introduction to Asset Pricing
This course is a six-week introduction course to the standard asset pricing theory's aspects of financial economics. The intended audience is first- and second-year PhD students in finance and related fields (e.g., economics, accounting). The book "Asset Pricing (Revised Edition)" by John Cochrane is the basic reference for this course. However, there are several additional textbooks relevant to this class, all of which are optional. Taking lecture notes, reading selected papers, and doing assignments will cover the core materials intended for this class. All papers in the reading sections can be downloaded (free) via the WashU network.
Credit 1.5 units.
Typical periods offered: Fall

FIN 8654 Empirical Methods in Asset Pricing
This course provides some of the common methodologies for testing various asset pricing models and discusses some of the recent research on empirical asset pricing.
Credit 1.5 units.
Typical periods offered: Spring

FIN 8655 Introduction to Corporate Finance
The course objective is to introduce doctoral students to corporate finance theory. The goal of the class is to enhance skills in developing and understanding corporate finance models, providing the foundations for theoretical research as well as theoretically grounded empirical research in the field.
Credit 1.5 units.
Typical periods offered: Fall

International Studies

INTL 5320 Business, Innovation and Entrepreneurship in Israel
Israel is an innovation and entrepreneurial hub with more listings on the NASDAQ than any country other than the US, more patents per capita and more entrepreneurial events occurring in Israel in both the commercial and social arena than anywhere else in the world. Students will learn about the Israel economy, different industries, Israeli culture and politics along with the critical business challenges and opportunities that face Israel. This course includes a required immersion experience to Israel and contains an additional lab fee for the immersion.
Credit 3 units.
Typical periods offered: Fall

Managerial Economics

MEC 5220 Healthcare Management
The goal of the course is to develop facility in applying basic tenets of general management to actual situations and dilemmas that might be faced by health care managers, consultants, financiers, investors, innovators, or providers in the course of their work. Issues addressed will include but not be limited to financial issues, management challenges, and conduct of operations. The first phase will cover the basic background on the structure and financing of the healthcare industry to include very brief reviews of critical topics like insurance and government-provided healthcare. A few basic frameworks will then be developed for students to apply to course topics moving forward, such as cost/benefit analysis and evaluation of risk. The remainder of the course will involve critical analyses of healthcare cases involving varied subjects and management challenges. Sessions will emphasize student led discussions.
Credit 3 units.
Typical periods offered: Spring

MEC 5310 The Global Economy
The purpose of this course is to present current issues pertaining to international economics, macroeconomics, and the global economy. The broad topics to be covered are: macroeconomic principles; exchange rate determination; balance of payments analysis; the choice between fixed and floating exchange rates, and the implications of that choice on the implementation of domestic policies; and finally a brief treatment of the determinants of economic growth and nations' development strategies. The material will be presented through a combination of lectures and case discussions.
Credit 1.5 units.
Typical periods offered: Fall

MEC 5380 Economics of the Organization
Business organizations are complex systems with mutually dependent parts. Understanding the economic factors that influence how the organizational pieces function together can be a daunting task. The goal of this course is to provide an economic framework for the analysis of a variety of challenges that face businesses, both at the organizational and individual employee levels. In this course we will consider what economics can say about the efficient organization of firms and businesses, and provides an economic approach to solving organizational and incentive problems. The aim of this mini is to describing general organizational issues facing firms, such as incentive problems arising from adverse selection, moral hazard, and agency. We consider alternative solutions to these problems and then apply these lessons to readings and cases.
Credit 1.5 units.
Typical periods offered: Spring

MEC 5381 Compensation, Incentives & Organizations
This course is the second in a linked sequence looking at the study of the economics and management of organizations, and focuses on issues at the individual employee level. We will use the tools developed in MEC 500D, Economics of the Organization, to examine how incentives and performance contracts should be combined in an organizational framework to motivate executive and employee performance. In this course we consider the economic incentive problems faced by a firm in recruiting, training, motivating, and retaining workers in the firm's internal labor market, as well as economic tools which may be used to construct compensation and non-compensation schemes to address these incentive problems and raise worker productivity The format of the course is to present the underlying theory or framework for the topic at hand, and then to illustrate how a firm was able (or unable) to implement the recommended approaches for solving the incentive problem.
Credit 1.5 units.
Typical periods offered: Spring

MEC 5400 Managerial Economics
This course introduces the basic principles of economics and their applications to managerial decision-making. The course begins with the analysis of the decision making of individual consumers and producers. The course then examines how consumers and producers interact with one another in a variety of market settings ranging from situations in which firms have many competitors and few tactical options to those in which there are a small number of firms competing vigorously along several strategic dimensions. Applications covered include decision making in risky situations, pricing policies in firms, and the relationship between market structure and the strategic choices that are open to the firm.
Credit 3 units.
Typical periods offered: Fall

MEC 5401 Managerial Statistics I
Introduces the statistical methods for analysis of business and economic data. The role of probabilistic concepts such as independence, conditional probability, expectation, and variance, and probability models such as the Bernoulli, binomial, Poisson, and normal are examined. Particular emphasis is placed on topics that relate to model formulation, estimation of model parameters, hypothesis testing and simple and multiple regression.
Credit 1.5 units.

MEC 5402 Macroeconomics for Business Leaders
An introduction to the U.S. monetary and financial system and its interaction with the overall economy. Among topics considered are the determination of interest rates, the relationship between monetary and real sides of the economy including savings and investment decisions and inflation rates, and the role of capital markets in GDP and productivity growth.
Credit 1.5 units.
Typical periods offered: Spring

MEC 5502 Business & the Environment
Credit 3 units.

MEC 5503 Macroeconomics for Managers
Credit 0 units.

MEC 5615 U.S. Macroeconomics Policies During Crises
The course will cover 6 - 7 different topics related to monetary policy, banking supervision and regulation, and financial markets. The course will feature notable speakers as well as lectures by assigned faculty. The goal is to present the best in contemporary thought regarding monetary and fiscal policy as well as public regulation of the financial sector.
Credit 1.5 units.
Typical periods offered: Spring

MEC 5630 Olin Grand Rounds
Grand rounds in medical schools are a forum for presenting new and challenging clinical problems and cases. The goal of Olin Grand Rounds is to focus on the challenges and solutions facing the business of medicine. The course will therefore provide an introduction to the current issues facing the health care sector that integrate management tools and clinical knowledge. The objective is to provide students with new insights into how modern management tools can be combined with scientific and clinical knowledge to manage health care organizations more efficiently and practice medicine more effectively.
Credit 3 units.
Typical periods offered: Fall

MEC 5640 Health Economics and Policy
The basic tenets of health economics will be covered. This course will place a unique emphasis on incorporating materials from three broad source categories -- textbook elements, lay press and media, and academic journal publications -- with the aim of fostering the application of rigorous, critical thought to media presentations of health care economics and policy issues.
Credit 3 units.
Typical periods offered: Fall

MEC 5660 Research in Healthcare Management
This is the capstone course for the Health Management major where students learn to apply rigorous statistical and analytical approaches to research questions in health services, but not limited to questions relating to management, finance and economics, operations, and policy. Faculty will identify several available research project options, and present these options in class. The goal is to capitalize on the strength of the university medical school and affiliated medical centers, in addition to capitalizing on existing relationships between Olin and healthcare firms to identify the student research projects. Students will also be encouraged to formulate their own research question and to identify potential data sources they could use to address these questions, if they so desire. Students will work in teams of 3-4, using the approach developed for the Practicum and Hatchery courses.
Credit 3 units.
Typical periods offered: Spring

MEC 5920 Competitive Industry Analysis and Strat Dev
Uses economic and game-theoretic models to analyze behavior of firms in American industries. Focus will be split between evaluating the competitive environment within industries and developing competitive strategies that are responsive to specific competitive forces facing individual firms. Topics typically include models of price and quantity competition, barriers to entry, commitment strategies and credible threats, product differentiation, vertical integration, research and development, and patenting strategies.
Credit 3 units.
Typical periods offered: Spring

MEC 5950 Game Theory for Business
The objective of this course is to provide students with frameworks and capabilities for making smart strategic decisions in evolving markets. Skills of this variety are critical for those intending to pursue careers in management consulting. Markets offering opportunities for improvement in technology or product quality/features are a classic example of the kind of situation to which these skills may be applied. For example, what is the value-maximizing mix of internally-oriented (innovative) versus externally-oriented (imitative) R&D investments? Do the life cycles of markets of this kind display common features? And if they do, how can these shared features be used to make smarter R&D mix choices, and to predict or influence the degree to which a firm can appropriate any value it creates?
Credit 3 units.
Typical periods offered: Spring

MEC 6540 Macroeconomics for Business Leaders
An introduction to the U.S. monetary and financial system and its interaction with the overall economy. Among topics considered are the determination of interest rates, the relationship between monetary and real sides of the economy including savings and investment decisions and inflation rates, and the role of capital markets in GDP and productivity growth.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MEC 7220 Managerial Economics
Examines the decisions of consumers and firms and the ways in which they interact in various market settings. Among the topics considered are consumer behavior and consumer choice, decision making when outcomes are uncertain, and the way in which firms' decisions are impacted by technology, input cost and the various competitive settings in which they operate. Emphasis is placed on concepts and tools that will be particularly useful in the study of marketing, finance and competitive strategy.
Credit 3 units.
Typical periods offered: Fall, Spring

MEC 7400 Opportunities and Challenges of Global Markets
From multinational conglomerates to domestic family-owned businesses, few companies are insulated from the effects of globalization. This course provides an opportunity to learn how to shape and execute a business response to the opportunities and risks presented by an increasingly global marketplace. It draws on prior lessons in economics, finance, marketing, organizational behavior, operations and strategy. Topics include market selection, penetration of emerging markets, and identification and management of financial, currency, and country risk.
Credit 3 units.
Typical periods offered: Spring

MEC 7430 Innovation and Entrepreneurship
The theme takes the perspective that innovation and entrepreneurship are core business processes associated with survival and growth of the organization, and it should be managed as such. We view innovation broadly as a process of knowledge creation, testing, and eventual implementation. Entrepreneurship creates new possibilities by bringing together a multitude of diverse assets driven by the understanding of customer needs and the evolving challenges of the competitive environment. The objective of the theme is to help our students develop the needed skills in managing the complex, multi-stage processes of innovation and entrepreneurship under highly uncertain conditions, whether the innovation and entrepreneurial opportunities

arise in a large, well-established company or a new startup. Educating professionals, managers, and executives in entrepreneurial thinking and innovative practices is a key strategic principal of the Olin business school, and our theme is in full support of it.

Credit 3 units.

Typical periods offered: Spring

MEC 7450 Sustaining Value Creation Through Corporate Strategy

Some of the most visible - and critically important - strategic decisions for an organization's performance reside at the corporate level: acquisitions, mergers, spin-offs, vertical integration, and diversification into new business areas. This course focuses on these critical decisions that confront the senior-most managers in multi-business corporations as they deal with continuous pressure to grow. Finding ways to add rather than destroy value at the corporate level is a difficult task.
In this course, we will examine the challenges faced by corporate managers in sustaining value creation across the portfolio of businesses and the tools that they can use to do so. We will focus on topics of leveraging resources and competencies, drawing horizontal and vertical boundaries, diversification, corporate organization, portfolio planning, and corporate governance.

Credit 3 units.

Typical periods offered: Summer

MEC 7700 Managerial Economics

This course is also a foundational course in that several of the core concepts you will learn in it will reappear in different concepts in your finance, marketing, operations, and strategy courses. For example, you will use the concepts of rational choice, consumer surplus, economic costs, and competitive equilibrium prices in your Strategic Management course. In this course, we will explore these concepts in greater detail. In addition, you will see that the basic rule used to set prices—the tradeoff between marginal costs and marginal revenue—is a basic decision rule that applies to a wide range of decisions. In your operations class, for example, you will see that it is the basis of many inventory decisions. Similarly, the differences between fixed costs and variable costs will be important to decisions about the optimal batch sizes for manufacturing and service processes. In finance, an important concept is the cost of capital, used to determine the minimum return a company needs to earn on the investments it makes, is based on the concept of opportunity cost, which we will explore in this class. For this reason, this course is an important building block for all the courses that follow it.

Credit 3 units.

Typical periods offered: Spring

MEC 7800 Data Science

With the development of information technology, every organization must adapt to a data-driven world where decisions are made based on not only fundamental business logic but also on real-time and high-dimensional data. The process of making data-informed, or even data-driven, decisions are called data science. Such decision-making process requires the leaders of organizations understand the technological platform of data acquisition, storage and analysis. It also requires leadership to be familiar with various data-driven decision-making techniques, their advantages, and their disadvantages.
This course introduces this topic and helps leaders to utilize data to better manage their organizations. The class will start with a general introduction of data science and provides several frameworks to classify data science into multiple sub-fields. Participants will have a general understanding of data science and the organization structure of various data science teams. The class then dives into two major sub-fields of data science: causal inference and machine learning. For each sub-field, participants will learn the basic concepts behind it, how to apply the techniques in this sub-field to different problems, and how to build a team that is specialized in these techniques. Participants will also learn the advantages and disadvantages of each sub-field, and how to combine techniques from multiple sub-fields to solve complex problems.
Last, this class will touch upon the topics between data science and society, including data
privacy, fairness in machine learning and adverse usage of machine learning models. Participants
will learn the ethical questions behind using different data science techniques.

Credit 3 units.

Typical periods offered: Fall, Spring

MEC 7960 Macroeconomics

The managers are required to understand international dimensions and implications of economics and finance in the context of increasing globalization of Indian economy, and integration of Indian financial markets with the world markets. The sources of capital, and avenues for investment are expected to transcend national borders with removal of restrictions on capital transactions (Capital Account Convertibility). The Indian foreign exchange market will also be integrated with those in other parts of the world, thus increasing the foreign exchange risk. The conditions in global economic environment will affect the performance of individuals, firms, and governments as evidenced by the impact of global financial crisis, the Asian financial crisis, and other events in the past. The participants will gain an understanding of the global economic environment, role of fiscal and monetary policies, interest rates and exchange rates, business cycles, and inflation. The course covers topics such as how exchange rates affect cash flows, how to minimize and/or manage foreign exchange exposure and risk, and the other issues in international business. It will build on the foundations of microeconomics, statistics (quantitative methods), and corporate finance.

Credit 3 units.

Typical periods offered: Summer

MEC 7970 Competitive Strategy & Indus. Structure

One of the distinguishing characteristics of highly successful firms (both large and small) is the alignment of competitive strategy (what to do once you are in a market?) with corporate strategy (what markets do you want to be in?) and the firm's internal organizational structure (what kind of firm are you?). Companies that fail often have these key elements misaligned. Competitive and corporate strategies involve factors such as competitors and customers, which are strategic factors that are fundamentally external to the firm. By contrast, organizational structure and strategy are fundamentally internal to the firm. In this course we will use the tools of strategic and economic analysis to understand these dimensions of strategy. In particular, we will use economic tools such as game theory and asymmetric information, which over the last 30 years have substantially augmented our traditional understanding of industry dynamics and firm structure.

Credit 3 units.

Typical periods offered: Spring

MEC 8610 Microeconomics I

First semester of the required microeconomic theory sequence for first-year PhD students at Olin. The first-year sequence prepares students to conduct original research in economics and related fields. Topics for the first half of the semester include individual choice in an abstract setting, decision making under uncertainty, expected utility theory, risk aversion, dynamic choice and an introduction to stochastic choice models. The second half will cover consumer theory, producer theory and general equilibrium.

Credit 3 units.

Typical periods offered: Fall

MEC 8615 Microeconomics II
MEC 615 is the second semester in the graduate PhD core microeconomics sequence. The sequence prepares students to conduct original research in economics and related fields. In the first half of the semester, students will cover all of the basic tools of game theory in economics. Topics for first half include a review of expected utility theory, strategic-form and extensive-form games with perfect information, Bayesian games, infinitely repeated games, dominance, and Nash equilibrium and its refinements. We will apply these tools to study strategic situations in industrial organization, auctions, bargaining, voting, and signaling games. The second half of the course covers topics in information economics and mechanism design, including social choice, price discrimination, auctions, moral hazard and adverse selection.
Credit 3 units.
Typical periods offered: Spring

MEC 8625 Industrial Organizational I
Starting from the 1970s, an increasing number of economic theorists have been becoming interested in Industrial Organization. This is because non-cooperative game theory became the standard tool to analyze strategic conflicts and it lent itself naturally to the analysis of industrial organization topics (while until then the tools of general equilibrium analysis were not ideal to tackle the same issues).The course aims to give you a concise but solid background of the classical results in IO theory,and to then highlight some very recent contributions to the same literature. We will give particular attention to the topics that are complementary to empirical analysis.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MEC 8626 Industrial Organization II
The course aims to further advance your understanding of the classical results in IO theory, and to then discuss some very recent contributions to the same literature. We will give particular attention to the topics that are complementary to empirical analysis. Since IO theory has become increasingly formal in the recent years, your familiarity with the theoretical game tools covered in the first year Micro sequence is essential.
Credit 1.5 units.
Typical periods offered: Spring

MEC 8648 Independent Study
Internship must be arranged by the student and approved by the advising faculty member. An outline of objectives must be submitted to the PhD Office prior to enrollment. May be taken a maximum of five (5) times for credit. Credit, variable; fifteen (15) credits combined total.
Credit 0 units.
Typical periods offered: Fall

MEC 8649 Directed Readings
Credit 3 units.
Typical periods offered: Fall

MEC 8670 Seminar in Econometrics
The purpose of this course is to provide a detailed coverage of Bayesian inferential methods and their applications to a variety of problems drawn from economics and business. Starting with basic ideas, the treatment covers Bayesian regression for univariate, multivariate and panel outcomes, hierarchical prior modeling, MCMC simulation techniques, computation of the marginal likelihood and model choice, and nonparametric techniques. A significant goal of the course is to show how these methods can be used for causal inference in the realm of the classical instrumental variables setting and in quasi experimental designs such as regression discontinuity designs. The course should be valuable for a variety of students including those with primary interest in economics, finance, marketing, operations, accounting, political science, statistics and biostatistics.
Credit 3 units.
Typical periods offered: Fall

Management

MGT 5020 Ethical Issues in Managerial Decision Making
This course considers not only what ethical behavior means for a business entity, but how to: (i) balance competing ethical concerns against each other; and (ii) implement and sustain this balance across an organization. Readings and classwork zero in on the issues and situations most likely to put a manager in jail and the company in bankruptcy. Classes include Socratic discussion, simulations, analysis of video clips, and team tasks. The emphasis is on practical frameworks and tools managers can apply in the real world.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5022 Applied Problem Solving for Organizations
Applied Problem Solving for Organizations will provide SMP students an opportunity to work on strategic problems for organizations on a virtual team. This class will be completely remote. Offered in a mini course format, this course will have scheduled meeting times in addition to work that will be coordinated by the group in consultation with their professor.
Credit 1.5 units.
Typical periods offered: Summer

MGT 5101 CEL Entrepreneurial Consulting Team
Fuel your entrepreneurial spirit and tackle real-world challenges— through CELect, an experiential consulting course offered through the Center for Experiential Learning. Connecting students with startups in St. Louis or San Francisco, working in teams of 4–6, you'll provide strategic insights to help emerging ventures scale, applying classroom knowledge to market research, financial strategy, forecasting, and growth planning. Through direct collaboration with clients and faculty, you'll develop critical skills in consulting, leadership, project management, data analysis, and persuasive communication.
Credit 3 units. Law: LCU, RW
Typical periods offered: Fall, Spring

MGT 5103 CEL Practicum
Drive meaningful change by consulting for established companies — Practicum, through the Center for Experiential Learning, allows you to collaborate with peers, faculty advisors, and corporate clients to solve real-world business challenges in areas such as market strategy, financial management, and operational efficiency. You'll gain practical consulting experience working with a student consulting team while refining critical skills in leadership, strategy development, project management, data analysis, and professional communication. Students are evaluated based on deliverables throughout the semester, including the final written and oral report at the project's conclusion.
Additional Information: Dropping this course after being introduced to a client may impact your ability to engage in leadership roles in future CEL courses. To enroll, you must complete an application by April 7, 2025, sites.wustl.edu/olincel If selected, the CEL will handle course registration.
Credit 3 units.

Typical periods offered: Fall, Spring

MGT 5105 Taylor Community Consulting Program
Make a meaningful impact on local nonprofit organizations and communities — The Taylor Community Consulting Program (TCCP), through the Center for Experiential Learning, allows you to partner with local, regional, and national nonprofit organizations to address strategic challenges and operational inefficiencies. Through this hands-on consulting experience, you'll work as a part of student consulting team to apply insights from your coursework to real-world problems under faculty supervision, helping nonprofits grow and enhance their impact. Students are evaluated based on deliverables throughout the semester, including the final written and oral report at the project's conclusion. **Additional Information:** Dropping this course after being introduced to a client may impact your ability to engage in leadership roles in future CEL courses.
Credit 3 units.

Typical periods offered: Fall, Spring

MGT 5106 Olin/United Way Board Fellows Program
As future business leaders, students will have the unique opportunity to impact the regional community by becoming a full voting Board member of a nonprofit United Way organization. This course offers a high-impact way for students to serve the community while gaining valuable experience that couples their business acumen to the mission of a nonprofit organization. As a Board Fellow, students will develop skills for effective and thoughtful community leadership addressing nonprofit sector issues, while collaborating with other board members, and spearheading a project relevant to the board's current initiatives. THIS IS A CONTINUOUS YEAR LONG COMMITMENT, from January through December. As a full Board Member, each student is expected to fulfill all the obligations of a Board member throughout the year, either in person or through remote access. Students accepted into the program register for the MGT 501B in the spring and MGT 501F in the fall. Prerequisite: Application is required, and enrollment is limited. Open only to MBAs, PMBAs, and EMBAs and dual degree students in the Law or Social Work Schools. All students must have completed their first semester of foundational courses prior to participation. Dropping this course may have an adverse impact your ability to register for other CEL courses in the future.
Credit 1.5 units.

Typical periods offered: Spring

MGT 5107 Olin Board Fellows Program
This course provides the unique opportunity to serve as a voting board member of a nonprofit United Way organization. You will serve the community while gaining valuable experience, coupling business acumen to the mission of a nonprofit organization. As a Board Fellow, students will develop skills for effective and thoughtful community leadership and gain business and communication skills as they address nonprofit sector issues, collaborate with other board members, and spearhead a project relevant to the board's current initiatives. THIS IS THE SECOND HALF OF A YEAR LONG COMMITMENT, first semester of MGT.501B is a prerequisite for MGT.501F. Grading is done after the completion of the course in December and will be applied retroactively to the Spring semester. Application required and enrollment is limited. . All graduate level students must have completed their first semester of foundational courses prior to participation. Dropping this course may have an adverse impact your ability to register for other CEL courses in the future.
Credit 1.5 units.

Typical periods offered: Fall

MGT 5110 Law and Business Management
We will review different rules of substantive law which affect the conduct of individuals and businesses. We will analyze different legal theories and rules of substantive law which regulate the conduct of individuals and businesses and which impose liability for damages on individuals and business entities when those rules are violated. We will survey basic rules of criminal law, intentional torts, and negligence. We will next focus on the rules affecting the making and performance of contracts, and the liability which results from breach of contractual relationships. This will include general contract law, as well as specific rules that exist in the sale of goods and merchandise, and in the purchase, ownership and sale of real property. In addition, we will also analyze and compare the choices available for dispute resolution, including mediation, arbitration, and trial in court.
Credit 1.5 units.

Typical periods offered: Fall, Spring

MGT 5200 Taylor Community Consulting Project
This course is designed to provide business assistance and expertise to St. Louis area non-profit agencies. Applications available in the Center for Experiential Learning, Simon 100. Open to MBA students, upper level BSBA students, and MSW students.
Credit 1.5 units.

Typical periods offered: Fall, Spring, Summer

MGT 5210 Introduction to Entrepreneurship
This course is designed not only for the student with a burning passion to start his/her own business, but anyone who believes that entrepreneurial skills are an essential element of business success. Introduction to Entrepreneurship is taught primarily via the case method. Most case discussions will be followed by a relevant guest speaker -either an experienced entrepreneur or a professional from the investment community. You will hear from entrepreneurs and corporate managers with an entrepreneurial flair, some who have experienced great success, and others for whom success has been elusive. The structure of this course follows the evolutionary process of a new venture. Topics covered include: Idea Assessment, Organization Formation, Capitalization, Growth, and Exit. Corporate Entrepreneurship also will be explored. This course integrates much of what you have learned in your core courses and challenges you to apply those learnings. In each class you will be expected to make difficult business choices with less than perfect information, dealing with ambiguity and uncertainty, much like a real life entrepreneur. Analytical rigor will be emphasized throughout and you will be expected to have run the numbers for each case. A central element of this course is the opportunity to pitch your business idea to classmates via a 5 minute elevator pitch. Those with the winning business concepts will recruit classmates to join their team to conduct a comprehensive feasibility analysis. Your final will consist of a formal 20 minute dress presentation of your idea-much like you would pitch your business concept to a potential investor. It is the professors' objective that by the end of this course you will: 1) Better understand entrepreneurship and the entrepreneurial process 2) Be an incisive analyst of a business and/or business concept 3) Be a more persuasive seller of your business ideas.
Credit 3 units.

Typical periods offered: Fall, Spring

MGT 5240 Business Planning for New Enterprises [the Hatchery]
Student teams pursue their own business idea or support outside entrepreneurs by researching, writing, and pitching business plans for new commercial or social ventures. Enrolled students can recruit a team to work on their own business idea, or can join a team working on another's idea. Outside entrepreneurs and scientific researchers wishing to recruit student teams must apply in advance to be considered for student selection. Most of the work is done

outside the classroom with the support of mentors, advisors and the instructor. Classes are held once per week for the first half of the semester. Workshops and rehearsals are required in the second part of the term. Students make final presentations to a panel of outside judges including venture capitalists, angel investors, entrepreneurs and people involved with early stage ventures.
Credit 3 units.
Typical periods offered: Fall, Spring

MGT 5311 Intro. to Management and Strategy
This course focuses on the job, perspective, and skills of the general manager--an individual charged with developing and implementing the long-term strategy of a business organization. The course helps students develop skills in identifying and analyzing past and current strategies and with formulating and implementing new ones. During the course, students are introduced to concepts including/related to strategy formulation, resource and capabilities assessment, industry and competitor analysis, diversification, globalization, and managing multi-business organizations.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5321 Business, Government and Society
All firms operate within competitive and institutional landscapes that are shaped and framed by government. However, firms have the power to help shape the role of government through non-market strategy, both to protect their own interests and to help improve the efficacy of the public-private partnership. Furthermore, managers must navigate the complex intersection between business objectives and the values, norms, and expectations of the societies in which they operate. This course harnesses Olin's unique partnership with the Brookings Institution to access high-level experts from agencies and institutions in the federal government only found in the capital area. We will focus on how a better understanding of the mindset, objectives, and operations of these institutions can help managers better shape strategy and activities at the intersection of the public and private sectors.
Credit 3 units.
Typical periods offered: Spring

MGT 5330 Effective Managerial Communication
This course expands MBA candidates' competencies in writing the emphatic and active voice style for different stakeholders, presenting under difficult or unplanned circumstances, evaluating the work of others and delivering constructive feedback, running better meetings, and writing and evaluating strategic documents. MBA candidates benefit from constructive feedback provided by the instructor and an international range of classmates. Assignments are drawn from real organizational cases requiring solid tactical thinking to ensure that communication is received well.
Credit 1.5 units.
Typical periods offered: Summer

MGT 5340 Corporate Strategy
Most major companies in the world are not single-business operations but portfolios of businesses spanning multiple locations. Single business firms today ultimately become multi-business firms to sustain their growth as they exhaust opportunity in existing markets. This course provides tools, frameworks and processes that help you understand the unique opportunities and challenges for firms spanning multiple products, business units, and geographic locations. This section is for MBA students.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5350 Strategic and Crisis Communication
This course refines MBA candidates' competencies in delivering strategic communications related to three concentration tracks (financial, marketing, consulting), communicating with employees and the public during high-risk situations, strategizing and delivering damage control messages and crisis communications, preparing for media coverage, and managing media interactions. The videotaped sessions, within the context of simulated high risk and crisis situations, provide MBA candidates with immediate feedback about the potential consequences of their communication strategy and word choices. Outside speakers provide anecdotal stories and advice; a local businessperson serves as a client for the final business presentation simulation.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5380 Integrated Value Creation: The Wholonics Approach
The purpose of this course is to develop an integrated model of shareholder value creation in organizations that relies on concepts students have learned in various functional areas, and to show how tangible(six-sigma quality initiatives, EVA, mergers, etc.), as well as seemingly intangible(leadership development, creativity, knowledge, innovation, etc.), forms of value creation affect firms' market values. This model exposes both the complementarities and the tensions in the four basic ways in which value is created in organizations, and sheds lights on how metric-driven conflicts arise in organizations to impede effective value creation for shareholders. We will discuss the rules of value creation in the four quadrants of the Wholonics model and examine the optimal design of performance metrics in these quadrants. We will examine best practices for different forms of value creation and analyze organizational situations from the perspective of a value-creation consultant. The goal is to develop an improved understanding of how soft and hard value creation initiatives interact and how one should design, manage and lead an organization.
Prerequisite: 2nd year standing.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5400 Sports Management
This course examines the key business and management topics in the sports industry, including league and franchise administration, team and individual sports, broadcast and digital media, data analytics, and leadership issues facing sports officials today. The course will look, in a practical way, at the strategic and operational challenges in the contemporary industry, while considering those issues in a historical context and discussing the future implications for all participants in the world of sports. The course's practical look at the sports industry will focus on key lessons for corporate management and administration.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MGT 5455 Acquisition Through Entrepreneurship
The purpose of this course is to provide students with an opportunity to explore being an entrepreneur by acquiring a company rather than starting one from scratch. The readings and class discussions will help students understand how to purchase a business, finance an acquisition, and operate and grow a business. The cases and conversations will help students understand what it is like being a young, first-time CEO and what types of challenges and issues will be encountered.
Credit 1.5 units.
Typical periods offered: Spring

MGT 5515 Internship, Business and Application
This internship course is designed to allow students to further develop their experience in a new setting. During the course, students should be able to identify their strengths and work motivations as they relate to future career goals. This course uses a pass/fail grading scheme, and it is one of several options for SMP students to use to satisfy their professional experience requirement.
Credit 1.5 units.
Typical periods offered: Fall, Spring, Summer

MGT 5570 Introduction to Non-Market Environment
While a firm's competitive advantage derives in large part from the development and exploitation of difficult to imitate capabilities and resources in the market environment, a firm's nonmarket business environment also poses important hazards and opportunities for strategy makers. Many barriers to imitation originate from, legal rules or government policies that favor some capabilities over others. The rules, and in many cases their enforcement, are not fixed constraints. Rather, they are determined by the competition between interests in public institutions. In many industries, participation in the policymaking and judicial process is a critical component in creating or sustaining a company's competitive advantage. This class focuses on the nonmarket environment from the point of view of managers and consultants. Its primary objectives are to examine the nonmarket environments of business in terms of the issues, interests, and institutions; to learn a set of conceptual frameworks for analyzing those issues, interests, and institutions; and to practice forming effective strategies for managing in nonmarket environment. Three sets of topics are considered: 1) Anticipation and management of nonmarket issues, 2) Nonmarket strategies in governmental arenas, and 3) globalization and international business.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5580 Managing the Innovation Process
The course takes the perspective that innovation is a core business process associated with survival and growth of the organization, and it should be managed as such. We view innovation broadly as a process of knowledge creation. Innovation creates new possibilities through combining different knowledge sets. This process is multi-stage and takes place under highly uncertain conditions. The course objective is to help develop for our students the needed managerial skills in managing the multi-stage process of innovation. We focus on the systematic management of innovation processes through careful resource commitment and management of involved uncertainties. There is no option to enroll in this course as a remote learner as this course will be taught only in person
Credit 1.5 units.
Typical periods offered: Fall, Spring

MGT 5600 Professional Business Communication
Communication is the process of sending and receiving messages, however, communication is effective only when the message is understood and when it stimulates action or encourages the receiver to think in a new way. This course will introduce students to fundamental best practices in business writing and business speaking that will ensure effective communication. Students will participate in activities that will develop professional business communication skills in both writing and speaking. These will include preparing, writing and delivering presentations, composing clear concise business messages in a variety of formats, understanding emotional intelligence to reach the audience and utilizing critical thinking as a basis for communication strategies.
Credit 1.5 units.
Typical periods offered: Fall

MGT 5602 Building Business Narratives
Develop life-long professional communication competencies and skills to improve leadership effectiveness through respect; active listening; relationship-building and emotional intelligence. You will create and communicate clear, effective written and oral messages that take audience needs into account and achieve the desired impact.
Credit 2 units.
Typical periods offered: Spring

MGT 5605 Ownership Insights: Competitive Advantage of Family and Employee Owned Firms
This course is designed to introduce students to the unique governance and financing issues faced by owners of closely held businesses and family-controlled firms. The core issue addressed in this course is that of sustainability: what actions are required of the current owners to increase the likelihood that the business will last beyond them? What best practices can we learn from successful multi-generational family businesses, some of which have been in existence for 150 years and longer? There are three target audiences for this course: 1) Students who may be or are considering working for a closely held or family-controlled business; 2) entrepreneurs who build successful businesses and want their business to remain privately owned; and 3) students seeking to work in the private equity, investment banking, legal or wealth management industries and who will be calling on this segment of the market. The course will be multi-disciplinary and more qualitative than quantitative. Each class will have a lecture and case component; there will be guest speakers at each session. Students will be required to complete a case study in advance of each class (not more than 2 pages). There will be no final exam. Class attendance and active participation is expected.
Credit 1.5 units.
Typical periods offered: Spring

MGT 5610 Legal Issues in Sports
This course introduces the fundamentals of sports law. It teaches the basic tenets of a variety of legal disciplines through the lens of sport, and it focuses on legal issues that have a direct relationship to sport with an emphasis on current legal sports issues in the news. In the tort arena, we will explore the potential liability of athletes for reckless violent actions toward their competitors; of sports teams and leagues for failing to adequately protect the health of participants (e.g., concussion lawsuits); of coaches, trainers and medical personnel at all levels for failing to properly train, monitor and assess athletes; of product manufacturers for injuries caused by defective sports equipment; and of teams for injuries to spectators, among other potential liabilities.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MGT 5620 Critical Thinking Processes and Modeling for Effective Decision Making
This course equips you with rigorous technical skills that are necessary for developing data-driven and value-based solutions for large-scale complex business problems. In particular, the course covers two fundamental and indispensable tools that form the backbone of all analytical approaches: 1. Mathematical Optimization is the backbone of virtually all applied models with vast applications in engineering, business, statistics (including machine learning), computer science (including artificial intelligence), biology, medicine, etc. The critical step in modeling a practical problem is to express it in mathematical language. This enables us to use the computational power of computers to analyze the problem, extract insights, and devise implementable solutions. The course teaches this critical skill by carrying out this step for a large set of examples. The examples are

carefully chosen to be both realistic and novel in at least one aspect. They are taken from various fields including operations management, marketing, finance, and machine learning. 2. Statistical Simulation is a primary computational tool for modeling complex systems that exhibit random behavior (such as service time in a service system) or interact with random events (such as demand in a retail setting or price movement in a stock market). This course covers the basics of Monte Carlo simulation through examples and showcases its application in estimating relevant performance metrics and predicting a system's response to exogenous or endogenous changes. If time permits, select topics related to simulation-based optimization will also be discussed. In addition to modeling and problem formulation, the course also covers problem implementation. The primary implementation tool in this class is Microsoft Excel. However, the topics covered in this class are independent of the implementation platform.

Credit 3 units.

Typical periods offered: Spring

MGT 5680 Africa Business Landscape

Sub-Saharan Africa, with a population of just over one billion which is growing at an annual rate of over 2.5%, offers long-term business opportunities across many sectors. This course covers conceptual frameworks for understanding sectoral opportunities in finance/ business services, manufacturing, high-technology, agriculture, natural resources (oil, gas, minerals), retail/personal services, and tourism. These business opportunities will be framed in the context of political change, the legacy of colonialism, urbanization, and trends in transportation and communication infrastructure development. Industry case studies will be completed to apply the concepts, guest speakers will offer focused insights, and student panels will provide opportunity to debate the ideas. Prerequisite: None

Credit 1.5 units.

Typical periods offered: Spring

MGT 5700 Global Business I

Examination of the management strategies of global businesses. We will use a network approach, though not exclusively, to understand firm strategies. Business networks are linked to knowledge clusters. Discussion of the rationale for going global and the internal organizational architectures and models that firms use for their global management. Global strategy of firms influences their external networks and how they deal with technological change. Examination of how logistics and finance relate to global business strategy. Consideration of political-economy of business and global economic crisis.

Credit 1.5 units.

Typical periods offered: Spring

MGT 5710 Venture Advising

Section 1: Students who complete the course will gain a deep understanding of the issues of both operational management and investment management of start-up firms from a different region of the world. Students will learn how to take into account the macroeconomic, political, and cultural issues that affect start-up businesses that are both operating internationally and raising capital internationally. Students will better understand the interpersonal dynamics between the relevant stakeholders, will become proficient in the terminology of start-up investing, and will learn how to create structure to unstructured problems thus improving their ability for critical thinking. Participants will be given the opportunity to apply their efforts beyond their basic functional business skills, and towards issues of relationship management and strategy. Required immersive experience to Herzliya, Israel in January. Prerequisites: MBA core and Introduction to Entrepreneurship recommended. Application via sa.wustl.edu is required. Enrollment limited to 40. Section 2: Students who complete the course will gain a deep understanding of the issues of both operational management and investment management of start-up firms from a different region of the world. Students will learn how to take into account the macroeconomic, political, and cultural issues that affect start-up businesses that are both operating internationally and raising capital internationally. Students will better understand the interpersonal dynamics between the relevant stakeholders, will become proficient in the terminology of start-up investing, and will learn how to create structure to unstructured problems thus improving their ability for critical thinking. Participants will be given the opportunity to apply their efforts beyond their basic functional business skills, and towards issues of relationship management and strategy. Required immersive experience to Berlin, Germany in March. Prerequisites: MBA core and Introduction to Entrepreneurship recommended. Application via sa.wustl.edu is required. Enrollment limited to 40.

Credit 3 units.

Typical periods offered: Spring

MGT 5765 Innovating for Healthcare

In this entrepreneurial course, students form teams and work on solving real problems facing the healthcare industry by producing solution prototypes that may also be commercialized by the students once the class is completed. The majority of the course work involves weekly customer interviews and team presentations on those findings. Using Lean Startup Theory, this course will provide an entrepreneurial platform that can develop solution prototypes that match the healthcare industry users' needs in just weeks, rather than months or years. Depending on the industry, grants or investors may provide follow-on funding to student teams for further refinement and development of solution prototypes. The course is demanding. Students will present at every class, work closely with their team, and receive relentlessly direct feedback. Problem sponsors, mentors, industry liaisons, corporate partners, investors, and journalists may be in the room while students are solving real problems for real customers in real time. This is a course designed for all graduate students and upper-level undergraduates in all Washington University schools and programs. It takes an entrepreneurial, interdisciplinary approach to the healthcare industry's biggest challenges. It is assumed that students will come into the course with a basic understanding of ideation, research methods, corporate entities, funding sources, intellectual property, and so on.

Credit 1.5 units.

Typical periods offered: Spring

MGT 5775 Launching and Scaling New Enterprises (The League)

This advanced entrepreneurship course acts as an accelerator, encouraging students to actually launch and scale a business. Students must apply at https://sites.wustl.edu/theleague/ either with a business idea OR to join a student team that is about to launch their business. Once accepted you'll be invited to join The League (of Extraordinary Entrepreneurs). Our most successful alumni in technology have agreed to be part of the class. This course covers leadership; crafting a story; product development; attracting customers; an innovative mindset; building successful teams; scaling to billion-dollar valuations and the mind of the high tech investor. The deliverables in the course include reflections on each of the unicorn guest speakers and how it applies to the students' ideas; actually launching their website and MVP of their product; meeting the growth goals the teams set for themselves; pitching real VC's and Angel Investors at the end of the course; and applying for a St. Louis Arch Grant. It is highly encouraged that those applying with business ideas have previously taken The Hatchery.

Credit 3 units.

Typical periods offered: Fall, Spring

MGT 5785 Strategic Data Storytelling and Visualization for Business

This course is an advanced communication course designed to build expertise in writing and presenting narrative strategies and visualizations from quantitative and qualitative data. Students will learn to transform data into compelling, professionally-written documents to ensure that the data is strategically presented to achieve a variety of business goals. Students will have the opportunity to have informal conversations and do formal presentations about a series of textual and numerical visualizations. Additionally, students will gain skills for using modern software tools to increase their technical acumen for analyzing data and developing a narrative and framework of explanation for conclusions. Students will be able to articulate the benefit of telling data stories strategically and with strong visual presentation for a variety of professional audiences. Prerequisite: MGT 560F.

Credit 1.5 units.

Typical periods offered: Spring

MGT 5795 Crucial Business Conversations

Conversations are essential in business, entrepreneurial, and consulting work, and they could help you succeed in client meetings, investor pitches, strategy sessions, and staff socials. This course applies synthetic thinking principles to simulated conversations set in business contexts. Students identify norms, rituals, and taboos that prevail in American business culture, as they build their Conversational Intelligence (C-IQ) skills. Students use the PACTS model (Purpose, Audience, Content, Tone, and Style) to guide their planned and impromptu interactions. For the final task, students show their knowledge of a topic they choose in a 10-minute, thought-leader interview. Invited business practitioners will provide feedback and tips throughout the course. Prerequisite: MGT 560F or permission from the instructor.

Credit 1.5 units.

MGT 5805 Consulting Business Models and Value Capture

Many of you will solve problems for a living. Whether or not your job title is 'Consultant', many of you will create significant value for your teams, organizations, and clients through your ability to address complex, unstructured problems in context- and resource- specific situations. This course focuses on understanding varied types of consulting business models, and developing competence in selecting and deploying frameworks and communication tools to address complex problems efficiently and effectively.

Credit 1.5 units.

Typical periods offered: Spring

MGT 5903 MBA Entrepreneurial Platform Seminar

This course is designed to expose first-year MBA students to potential careers in entrepreneurship and corporate innovation through access to numerous guest speakers who have either founded startups, funded startups, joined startups, have innovated at established companies, or have founded non-profits (or for-profits) with a social mission. Over the course of the semester each class session will focus on a specific entrepreneurial career path where students will hear from real-world experts followed by Q&A.

Credit 0.5 units.

Typical periods offered: Fall

MGT 5904 Consulting Industry Seminar

This course is designed to expose MBA students to the language, issues, and skill sets necessary for careers that have one of two distinguishing characteristics: (a) a consultative approach to problem-solving, be it as an internal consultant or working as a professional in a consultancy, and (b) in settings where solutions to such problems typically require engagement across multiple functional domains within organizations. The specific paths explored in this course include careers in consultancies (strategy, human resources, and economics/finance); 'internal' consulting positions within large organizations; and, 'rotational leadership' and other developmental programs that lead to general management positions where graduates lead business units or firms. Because this platform also is a potential foundation for students interested in the Business of Healthcare, Entrepreneurship, and International Management, there also will be sessions briefly introducing the nature of career opportunities in those areas.

Credit 0.5 units.

Typical periods offered: Fall

MGT 6228 Generative AI for Communicators

Artificial Intelligence has taken organizations by storm, from virtual assistants and chatbots to recommendation engines and predictive analytics. Contrary to the utopian/dystopian hype surrounding generative AI, its capabilities remain comparatively narrow. As such, business leaders must understand what they can expect from generative AI and how to maximize its potential to complete daily tasks effectively. In this non-technical course, you will learn the basics of how generative AI works so that you can optimize output. You will learn prompt engineering and scaffolding using free tools, including ChatGPT, to leverage generative AI to solve business problems. By the end of this course, you will have the AI-powered communication skills needed to add value to your organization and stakeholders. No coding skills or data analytics are included. This course is for PMBA, Online MBA and Flex MBA students.

Credit 1.5 units.

Typical periods offered: Fall, Summer

MGT 6317 Values-Based, Data-Driven Decision Making

In a world of rapid technological change, data-rich production processes, a diverse & purpose-driven talent pool, and calls for greater business accountability to society, business leaders must be equipped to make decisions that are both data-driven and values-based. The central goal of this course is to prepare you to approach every business decision with thoughtful attention to both values and data.

Credit 3 units.

Typical periods offered: Spring, Summer

MGT 6330 Strategy for Organizations

You will learn how to analyze an organization's strategy and how to design and implement changes that improve the organization's performance. The frameworks that we use will also help you understand and predict the behavior of competitors, suppliers and customers by analyzing and understanding their organizational strategies. You will have the opportunity to apply the course lessons to an organization of your choosing, such as a current or potential employer.

Credit 3 units.

Typical periods offered: Fall

MGT 6534 Corporate Strategy

Most major companies in the world are not single-business operations but portfolios of businesses spanning multiple locations. Single business firms today ultimately become multi-business firms to sustain their growth as they exhaust opportunity in existing markets. This course provides tools, frameworks and processes that help you understand the unique opportunities and challenges for firms spanning multiple products, business units, and geographic locations. Specifically, we will adopt the perspective of top management teams and discuss (1) How multi-product, multi-business, and multi-location firms create value beyond what investors could enjoy using a stock portfolio; (2) How firms identify and explore new growth opportunities without compromising their core competence; and (3) How corporate

managers develop structure, systems and processes to manage the mix of businesses effectively. We will use a mixture of cases, lectures, in-class exercises, and discussions of current events. The goal is to develop the skill set and logical clarity necessary to analyze complex problems involved in corporate strategy.

Credit 1.5 units.

Typical periods offered: Spring

MGT 6800 AI & Machine Learning Business Applications: Part A

Only doctoral students or students with instructor approval can enroll in this course.

Credit 3 units.

Typical periods offered: Fall

MGT 7010 Strategic Management

This course introduces the skills and concepts of general management and strategy. The course adopts the perspective of the general manager; an individual charged with diagnosing complex situations and resolving them in ways that enhance organizational performance. To succeed as a general manager requires a vast set of skills. Many of these skills will be developed in subsequent coursework during your Olin EMBA program. By placing you in the shoes of the general manager early in your EMBA program, this course previews the issues and content that will arise throughout the program.

The course focuses on how general managers position businesses and assets and craft strategies in ways that maximize long-term returns and generate value. We will focus on the characteristics of competencies and strategies that make some competitive positions strong and viable, while leaving others weak and vulnerable. We will examine how varying industry conditions influence firm performance and alter strategic decisions.

An overriding objective of the course is to cultivate your skills in analysis, diagnosis, and strategy development. Through cases and discussion, you will analyze current capabilities and competencies, diagnose problems, and develop strategies that promote sustained competitive advantage.

Credit 3 units.

Typical periods offered: Fall, Spring, Summer

MGT 7025 Leadership Communication

Top business leaders must align, inspire, and engage others to achieve important organizational goals. This course will help students develop communication competencies in four areas recognized as critical contributors to leadership success: 1) Demonstrating Respect, 2) Active Listening, 3) Relationship Building, and 4) Exercising Emotional Intelligence.

Credit 1.5 units.

Typical periods offered: Fall

MGT 7060 Strategic Management

Explores general management skills in analyzing, formulating and implementing strategies. Students will develop skills in assessing internal capabilities and resources, evaluating industries and competitive environments, and exploring strategic options. This course will help students understand the fundamental task of the general manager, which is to develop strategies that deliver a competitive advantage.

Credit 1.5 units.

Typical periods offered: Fall

MGT 7100 International Management Residency

This immersion program provides executives the opportunity to engage with leading thinkers at the intersection of business, government, and society. Many of these thinkers are associated with the Brookings Institution. For over 100 years, the Brookings Institution has been a leader in discussions about US national policy and global affairs. Brookings is consistently ranked as the most influential, most quoted, and most trusted think tank in the world. WashU at Brookings is uniquely positioned to maximize this reputation by engaging renowned policy experts, senior ranking officials, and other key decision-makers to provide students with rich and nuanced knowledge of the policy process. Brookings scholars and other experts will provide insight into domestic and global dynamic.

Credit 3 units.

Typical periods offered: Fall

MGT 7200 Strategic Management of Innovation

Credit 3 units.

Typical periods offered: Summer

MGT 7210 The Entrepreneurial Mindset, PT I

The course is designed for students who are interested in understanding entrepreneurship, forming companies, affecting social impact through entrepreneurship, corporate innovation, or investing in startup ventures. Even if the student is not interested in starting a venture of their own, understanding the entrepreneurial process will enhance productivity even in large organizations. It is also an opportunity for students to expand their personal and business networks to the greater WashU Community both within St. Louis, across the United States, and across the world.

Credit 1.5 units.

Typical periods offered: Spring

MGT 7350 Fudan Thought Leaders

In the past 30 years, China has embarked on a path of policy reform and opening up, allowing the country to continue to grow and advance with the times. There is no ready-made or one-size-fits all path or model of development that suits all countries in the world. For this reason, China has explored and crafted its own development path and model in a manner that has been consistent with China's unique heritage and rapidly evolving conditions. In this process, the combination of large geographic size and population, diversity of local culture, and a unique political legacy have all contributed to create unprecedented opportunities for local and foreign companies to innovate in both the products they offer and the processes they use. This path of innovation will be increasingly important to the global economy.

Credit 3 units.

Typical periods offered: Fall, Summer

MGT 7450 Innovation Projects - Module 1

This series of three courses serves as an integrating and applied learning experience. Rather than introduce new material, concepts, techniques or skills, the course challenges students to apply what they have learned throughout the program to the process of taking a business innovation from initial idea to a developed business plan.

Credit 1 unit.

Typical periods offered: Spring

MGT 7451 Innovation Projects - Module 2

This series of three courses serves as an integrating and applied learning experience. Rather than introduce new material, concepts, techniques or skills, the course challenges students to apply what they have learned throughout the program to the process of taking a business innovation from initial idea to a developed business plan.

Credit 3 units.

Typical periods offered: Summer

MGT 7452 Innovation Projects - Module 3

This series of three courses serves as an integrating and applied learning experience. Rather than introduce new material, concepts, techniques or skills, the course challenges students to apply what they have learned throughout the program to the process of taking a business innovation from initial idea to a developed business plan.

Credit 2 units.

Typical periods offered: Fall

MGT 7490 Integrative Mid-Term Project

Team-based consulting project - EMBA teams will be asked to develop and present a consulting report for a local client firm. The client firm will be a start-up or a small business interested in growing. It may be non-profit or for-profit organization. The client will be selected from among Washington University affiliated companies, companies to which EMBA students have connections, or from companies in the local community more broadly. Students will be challenged to apply the tools they have learning in the first year of their EMBA program to help the client formulate and solve business problems.

Credit 1.5 units.

Typical periods offered: Summer

MGT 7520 Corporate Strategy

Most major companies in the world are not single-business firms operating in a single location but portfolios of businesses spanning multiple locations. Single business firms today ultimately become multi-business firms to sustain growth as they exhaust opportunity in existing markets. This course provides tools, frameworks and processes that will help you understand the unique opportunities and challenges for firms spanning multiple products, business units, and geographic locations.

Credit 3 units.

Typical periods offered: Spring

MGT 7550 Entrepreneurship

This course ties effective idea generation and new-venture creation to competitive advantage and market leadership for both entrepreneurs and intrapreneurs. Student teams develop their business plan for their innovation project.

Credit 1.5 units.

Typical periods offered: Spring

MGT 7570 International Residency

Effective leadership in a diverse, globally interconnected world requires understanding the historical, political, economic, and cultural contexts of unfamiliar people and markets. Successful leaders must adapt both their business models and their leadership styles to align them with the sometimes very different realities of these markets. Through a combination of background research, discussions with in-market experts, and on-the-ground experiences in an international location, this course equips students with the tools to gather and synthesize quantitative and qualitative information about unfamiliar markets and to formulate values-based and data-driven strategies for working in them. Through first-hand encounters with unfamiliar cultures, students develop their cross-cultural capabilities and grow more agile, resourceful, and empathetic as leaders.

Credit 2 units.

Typical periods offered: Fall

MGT 7770 Business Start-Up Consulting Project

This course of Joint EMBA degree of IIT Bombay - Washington University in St Louis is designed to provide EMBA candidates with an opportunity to engage in active and functional learning through work on actual, real-world, team-based projects. This course will help implement the learning of completed EMBA modules and past experience of Sr executives focused on developing/refining entrepreneurial mindset through experiential real-world projects. This course will help develop management-consulting competencies and polish their critical thinking, project management, data analysis, report writing, diplomacy and leadership skills. Critical learning outcomes include developing entrepreneurial mindset and displaying agile leadership within diverse and unfamiliar settings. In this module, participants will be working towards the actual deliverables that generate tangible results for the client and its organization. This ensures that the clients receive high-quality work on their underlying problem/opportunity. The reasonable expectation is that students spend 2+ hours per week on the client work.

Credit 3 units.

Typical periods offered: Spring

MGT 7850 Business, Government & Society

Provides on-the-ground instruction at one of the world's premier public-policy think tanks, the opportunity to learn from key leaders and policymakers, and firsthand experience with the critical connection between business and government.

Credit 3 units.

Typical periods offered: Spring

MGT 7900 Business Analytics & Decisions

This course focuses on developing improved decision-making through analytic methods and applied critical thinking. While the course's foundation lies in the tools of probability, statistics and quantitative methods, we will strive to help mid/senior managers understand the strengths (and weaknesses) of using quantitative information (data), as well as develop frameworks and mindset to both utilize and question the kinds of analytics they may encounter from the executive vantage point. It will also guide them in what kinds of analytics they should be asking for, given the current state of modern data science and methodology.

Credit 3 units.

Typical periods offered: Fall

MGT 8200 Empirical Methods in Business: Part B

The objectives of this course are to train PhD students in different business disciplines to understand: how to use data to address research questions, how to build econometric models that can be applied to data, and how to estimate the econometric models using some statistical packages. This course emphasizes on empirical data handling and estimation issues.

Credit 3 units.

Typical periods offered: Fall

MGT 8603 Seminar in Strategy & Organization

This course focuses on theoretical and empirical work regarding the economics of organizations defined very broadly. Rather than focusing solely on organizational economics as it has evolved in the economics literature, this course emphasizes complementary and competing theoretical and empirical work in the organization theory and strategy literatures. The course also seeks to interpret and analyze observed organizational forms, trends, and choices using insights from the theories that we examine.

Credit 3 units.

Typical periods offered: Fall

MGT 8610 Teaching Business
The course on teaching business is designed to help late-stage doctoral students (and early-stage faculty members) to prepare systematically for their teaching careers in a business school. This inlucdes guidance on how to get started while avoiding rookie mistakes, and hands-on practice that includes coaching from peers and experts. The format will include discussion sessions, topic-oriented panel sessions, and hands-on practice sessions. For Doctoral students only
Credit 1.5 units.

MGT 8620 Empirical Methods in Business
The objectives of this course are to train PhD students in different business disciplines to understand: how to use data to address research questions, how to build econometric models that can be applied to data, and how to estimate the econometric models using some statistical packages. This course emphasizes on empirical data handling and estimation issues. Students are expected to have basic statistical knowledge such as random variables and distributions, tests of statistical hypothesis, basic linear regression and maximum likelihood estimation.
Credit 3 units.
Typical periods offered: Fall

MGT 8623 Seminar in Strategy
Research on global strategy and management is interdisciplinary in nature, drawing on multiple theoretical paradigms and empirical frameworks at multiple levels of analysis. This course provides students with a solid understanding of the major research areas related to this topic, including the structure and performance of multinational enterprises, determinants of trust and trade across countries, and non-market strategy. For students interested in pursuing global strategy research, this course will help them to develop unique research opportunities presented by cross-country differences in institutions, management, productivity and structure. For others, the interdisciplinary nature of this literature provides exposure to a wide variety of research approaches and tests skills related to critical assessment.
Credit 3 units.
Typical periods offered: Spring

MGT 8650 Seminar in Entrepreneurship
The course is divided roughly into two sections. We begin with an immersion section (entrepreneurship statistics, history of entrepreneurship, entrepreneur biographies) to provide a rich contextual framework for understanding the phenomena we will examine later. Next we look at the phenomena themselves. These phenomena present the existing set of questions that a field of entrepreneurship will necessarily encompass. Our challenge is to make sense of the existing questions and build an organizing framework for formulating future questions.
Credit 3 units.
Typical periods offered: Fall

MGT 8660 Seminar On Presentation Skills
The goal of this course is to teach students the basic principles of effective research communication sufficiently early in the program, so that they have multiple opportunities to practice and hone their skills. The learning objectives are as follows: 1) demonstrate knowledge of how to organize thoughts and write research papers effectively. 2) demonstrate ability of how to design effective presentation decks for seminars and conference presentations and 3) Improve the criticial thinking that underlies research before, during, and after its completion.
Credit 1.5 units.
Typical periods offered: Fall

MGT 8684 Independent Study
Credit 2 units.
Typical periods offered: Spring

Marketing

MKT 5000 Intensive Industry Project
Students will work in teams on an analytics-driven client project, applying the tools that they learned in their fall course work to the client's data-driven business problem under faculty and client supervision. Each student is expected to spend about 150 hours on the project. Grades are based on the quality of the final deliverables (i.e., a written report and oral presentation).
Credit 3 units.
Typical periods offered: Fall, Spring

MKT 5002 Customer Analytics
Customer Analytics addresses how we use data to learn about and market to individual customers. Using a combination of lectures, labs, and case analyses, we aim to gain a better appreciation of the advantages and limitations of data analytics and learn to communicate insights using analytical tools. The main programming language for this course is R. R is difficult but one of the industry standard languages for data analytics, visualization, and machine learning. The instructor offers an R preparation session at the beginning of the course and will provide sample codes and guidance during the semester. But if you have never used R or other programming language before, the learning curve of R language may be challenging.
Credit 3 units.
Typical periods offered: Spring

MKT 5003 Digital Marketing and Analytics
The aim of this course is to provide a rigorous and comprehensive introduction to technology and methods of conducting marketing activities online. Specific objectives are to introduce students to: (1) Concepts and terminology of digital marketing; (2) Specifics of online consumer behavior and internet-based business models; (3) Hands-on experience in creating and running advertising campaigns in social media.
Credit 1.5 units.
Typical periods offered: Spring

MKT 5200 Creating and Building Brand Equity
A brand is a promise, and this promise is often the most valuable asset of a firm. In this class, students will examine the creation and building of brand equity to create long-term profit for the firm. The class will examine what we know from the science of branding from a consumer psychology perspective. While learning the foundations of brand management, students will develop the skills needed to create a meaningful brand, position a brand, develop brand names and logos, promote a brand, leverage brand equity, extend a brand, and communicate brand meaning via traditional and social media.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MKT 5315 Marketing Metrics
Help early-stage companies grow and scale — The Marketing Metrics clinic, through the Center for Experiential Learning, offers you the opportunity to work directly with early-stage companies, where you'll develop data-driven growth strategies and actionable solutions in student consulting teams. In this immersive experience, your student consulting team will address critical challenges, optimize performance, and implement strategies that drive measurable impact. This course equips you with the skills to accelerate growth in any organization – startup to enterprise. Each team will meet weekly with the instructor for guidance, progress updates, and regular client check-ins. **Additional Information:** Dropping this course after being introduced to a client may impact your ability to engage in leadership roles in future CEL courses. You are not able to self-register for this course; it is admin registration only.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MKT 5503 Marketing Management
The purpose of this courses is to familiarize students with the foundational elements of marketing strategy and execution in various managerial contexts. Class sessions emphasize customer/market focus and competitor analysis to coordinate marketing tactics in a manner that drives growth in revenues and earnings. The course primarily uses case discussions, with lectures where appropriate. The cases provide students an opportunity to develop their oral and written skills in formulating and defending their marketing proposals. Recent developments in theory and practice are integrated into the course as appropriate.
Credit 3 units.
Typical periods offered: Fall

MKT 5550 Data Analysis for Brand Management
Today's brand managers typically have access to large quantities of data. For example, managers of consumer packaged goods brands typically have access to supermarket scanner data that cover thousands of daily transactions in hundreds of product categories at the store. Careful analyses of such data leads to an improved understanding of the marketplace and, in turn, improves the quality of marketing decisions. This course will cover statistical models and techniques that can be effectively used by brand managers on large marketing datasets. While the focus will be on fast-moving packaged goods categories (coffee, laundry detergents, carbonated beverages etc.), the course will also deal with durable goods (automobiles), entertainment products (movies) etc. Microsoft Excel will be used for analysis.
Credit 1.5 units.
Typical periods offered: Spring

MKT 5551 Analytics Driven Brand Management
Examines the formulation of strategies for building, leveraging, and defending brands, and the management of programs that influence consumer and channel behavior. Beginning with a discussion of consumer purchasing behavior, the course develops the concept of brand equity and its measurement. Strategies for building new brands and extending and defending the equity in established brands are analyzed. Introduces current thinking about communication and promotion strategy, and how their ability to influence consumers and channel intermediaries can be improved. Issues such as the evolution of cooperative channel activities (e.g., the efficient consumer response movement) and the rise of electronic commerce and its impact on brand building strategy will also be discussed.
Credit 1.5 units.
Typical periods offered: Spring

MKT 5580 Pricing Strategies
This course is designed to equip you with some essential concepts and techniques needed to make profitable decisions about one of the most important marketing variables--price. The course is structured around four fundamental factors that firms need to consider in their pricing decisions: costs, customers, competitors and climate (legal environment). Through case studies, in-class discussions, and course project/presentations, this course will provide you with a conceptual framework, grounded in modern economics and consumer psychology, for analyzing a complex marketing environment and designing proactive pricing strategies that are most profitable for your business. Familiarity with basic statistical techniques and a spreadsheet package like Excel is desirable.
Credit 1.5 units.
Typical periods offered: Fall

MKT 5581 Pricing Decision Making & Implementation
The focus of this course is on pricing tactics and strategies that are proven to be profitable for firms. Through case studies, lectures, a pricing simulation game and presentations, this course will help you to gain insights into successful pricing strategies in various industries and to develop your own skills necessary to make the most important business decision--pricing--in your organization. Topics of discussion include pricing innovative products, pricing and market making on the Internet, pricing of digital products, and dynamic pricing. Familiarity with basic statistical techniques and a spreadsheet package like Excel and completion of MKT 558 is strongly recommended.
Credit 1.5 units.
Typical periods offered: Fall

MKT 5590 Creating and Marketing Innovative Products and Services
In a rapidly changing business environment where product life cycles are shortening and competition is intensifying, creating new products has become the most significant and most risky activity within a firm. This course is the first of a two-part sequence, which aims to develop an understanding of the state-of-the-art strategies, processes and methods used in developing new products. This course focuses on key new product issues including generation and assessment of ideas, value creation in competitive markets, the impact of disruptive technologies on mainstream industries, and the diffusion of innovative new products and services. This is a case-based course, where students participate in a dynamic and interactive group environment to develop the capacity to use the information learned to make informed new product decisions.
Credit 1.5 units.
Typical periods offered: Fall

MKT 5591 Marketing Strategies for Innovative Products and Services
This course is the second of a two-part sequence. Each part in the sequence focuses on different areas of new product creation and can be taken as a stand-alone course. However, substantial synergies are gained by attending both courses and attaining extensive knowledge of the strategies, processes and methods used in creating successful new products. This course focuses on issues including business model innovation, marketing mix (4P's) decisions for new products, concept and market testing, first mover dis/advantage, and expanding the product portfolio. This is a case-based course, where students participate in a dynamic and interactive group environment to develop the capacity to use the information learned to make informed new product decisions.
Credit 1.5 units.
Typical periods offered: Fall

MKT 5615 Introduction to GIS and Spatial Mapping
This course will introduce students to spatial thinking, Geographic Information Systems (GIS), and their application to solving important problems in the business world. Location plays an important role in business decisions ranging from where to locate a new store, how to efficiently deliver goods and services, to identifying customers and determining common demographic factors that define markets. This course will teach fundamental concepts such as how spatial data is generated, how to evaluate various sources, and common spatial analysis workflows. Students will learn how to use a browser-based GIS application to create maps and perform spatial analysis including geocoding, routing, and data integration. Upon completion students will be able to understand how GIS and Location Intelligence are used in business; confidently use the ArcGIS Online (AGOL) platform for spatial analysis and mapping; find, evaluate, and manage spatial data sources used for making business decisions; apply demographic analysis to identify customer characteristics using location; perform routing functions and quantify delivery logistics; carry out a Site Selection project to identify the best location for a new store.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MKT 5710 Marketing Research I
This course teaches the essentials of marketing research: how to collect and analyze data in order to understand and characterize the target consumer. This is done in two steps: 1) collecting data from consumers using techniques such as focus groups, surveys, laboratory experiments and so on; and 2) analyzing the collected data using techniques such as linear regression, factor analysis, multidimensional scaling, conjoint analysis, and so on. The course will teach students how to implement these techniques using standard software. The format for the course is lecture and cases.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MKT 5711 Advanced Marketing Research
This course will cover an area of emerging interest for marketers owing to the recent explosion in e-commerce: database marketing. It will teach how a marketing manager can make sense out of large purchase databases, both internal to the firm (i.e., purchase histories of existing customers) and external to the firm (i.e., data purchased from marketing research vendors such as A.C. Nielsen, IRI and Media Metrics). Students will learn the applicability of customer relationship management (CRM), lifetime value models, and data mining techniques to identify and retain profitable customers. The course will also teach students how to implement a few of these methods using standard software. The format for the course is lecture and cases.
Credit 1.5 units.
Typical periods offered: Fall, Spring

MKT 5760 Understanding and Influencing Consumer Behavior
If consumer behavior were easy to explain, then all products would sell as projected, all ads would be effective, economies would be perfectly efficient, and marketing would be a simple prospect. In reality, consumers are frustratingly human: irrational, emotional, and difficult to predict. Marketing begins and ends with consumers, and in this class we will discuss foundations of human behavior that will help us understand and predict consumer choices.
Credit 1.5 units.
Typical periods offered: Fall

MKT 5770 Marketing Strategy
Marketing strategic decisions require long-term planning and are often costly to change once implemented. They often involve more than one marketing mix variable (price, advertising, promotions, loyalty program) that have to be consistent with a firm's core competencies and complementary with each other, with the purpose of establishing competitive advantages over competitors. A good strategic planning requires careful analysis of market environments related to customers and competitors of a company. With the development of the information technology in recent decades, companies have collected valuable data, either by themselves or from third-party data providers, on customers and competitors. The biggest challenge for most companies, however, is how to use the data for strategic decision-making. The objective of this course is to provide a comprehensive framework to help understand the strategic situations of firms and trade-offs in the decision-making. This course covers some analytical and modeling techniques, but the focus is on the use of analysis results. It provides students the fundamental knowledge of analyzing data and solving business problems that have long-term impacts on business. Different marketing topics will be covered. One example is customer analysis, which is the most important strategic component for marketers. Other topics related to market competition, including competitor analysis, positioning, product and entry strategies, pricing and advertising planning will also be covered. This course is analysis driven, with the focus on better use of data. Doing so helps to develop initiatives for strategic planning to better compete in the market.
Credit 3 units.
Typical periods offered: Fall

MKT 5800 Marketing Research Analytics
This course is designed to provide students with an appreciation for the role of marketing research in the formulation and solution of marketing problems. In this course, students will develop basic skills related to conducting and evaluating marketing research designs, alternative methods of data collection, and data analysis techniques.
Credit 3 units.
Typical periods offered: Fall

MKT 5820 Business Marketing and Sales
This course builds skills in intermediary & channel management, product & customer management, and sales management. We will accomplish this by blending and applying tools and frameworks from the areas of marketing, negotiations, and managerial accounting.
Credit 3 units.
Typical periods offered: Fall

MKT 5905 Marketing Industry Seminar
To improve industry awareness and overall savvy of our students interested marketing careers. This course is designed with several objectives in mind. First, it exposes our MBA students early on to the language, issues, and skill sets necessary for specific careers in marketing. Such learning goes beyond what can be covered in the marketing core course. Second, the increased industry exposure and roles and responsibilities of entry level product brand managers should play well as students prepare for internship interviews. Third, the relatively exhaustive review of each career path should facilitate the students' ability to appropriately pick a career path. Prerequisite: First-Year MBA student in good academic standing.
Credit 0.5 units.
Typical periods offered: Fall

MKT 6501 Customer Analytics
Customer analytics is about using customer data to make business decisions and predict future behavior. This course will build and implement powerful and leading-edge models for customer acquisition, retention, behavioral patterns such as website visits, customer lifetime value and direct marketing responses. The course will provide a unifying framework for thinking about customer data analysis and develop hands-on experience in model building and estimation using Microsoft Excel. These models use basic building blocks from probability theory to offer behaviorally plausible perspectives on what people buy, when they buy, and how much they buy. Anyone with interest in the revenues generated by customers (such as managers, consultants, analysts and investors) can benefit from deeper insights and more accurate forecasts that result when accounting for these patterns in their models.
Credit 3 units.
Typical periods offered: Fall

MKT 6559 Creating & Managing Innovative New Products
A firm's ability to grow profitability has never been more difficult, the primary driver of which is technology. First, rapid development and frequent technological advancements offer abundant opportunities to create new value in established and emerging markets. Second, technology has significantly reduced the barriers to entry in various industries, posing a threat to long-term success for incumbent firms. Third, technology has facilitated a fundamental power shift, granting consumers greater control and making them more challenging to acquire and retain. Although organizations of all sizes realize innovation is critical to succeeding in this new environment, new product innovation success rates remain low. This course equips students with a comprehensive approach to better succeed by teaching them how to 1) create an environment and culture, including the right mix of resources, processes, and technologies, to innovate successfully, 2) uncover qualitative and quantitative insights to inform new product and business model innovation opportunities, 3) convert consumer, market, and business insights into clearly defined innovation opportunities and then properly assess their potential, 4) develop and document a new product and business model strategy to enable a firm to create and convert new, differentiated value, and 5) design, prototype, test, and measure a new product and business model strategy to drive prioritization and roadmap decisions over time. Prerequisite: Only OMBA and PMBA students can enroll in this course.
Credit 1.5 units.
Typical periods offered: Fall

MKT 6582 Business Marketing and Sales
This course will explain the key features and idiosyncrasies of business markets (Customers & Intermediaries vs. Consumer Markets). Apply basic sales strategies, techniques, and negotiation tools to drive revenue & profitability (Sales & Selling Skills). Apply pricing techniques and markup practices relevant to manufacturer-channel relationships (Value vs. Markup Pricing) and apply financial techniques to understand and manage profit at the product and customer levels (Relationship Management). Prerequisite: admission to Olin's Online MBA Program.
Credit 3 units.
Typical periods offered: Fall, Spring

MKT 7710 Marketing Management
Upon completing this course, students will obtain the following core competencies: Competency to critically define the marketing concept for a specific business, Competency to systematically scan the marketing environment surrounding one's business, Competency to analyze and undertake segmentation, targeting, and positioning, Competency to coordinate the 4P's (Product, Price, Promotions, Place) for a product or service, Competency to undertake customer acquisition and retention using analytics-driven CRM.
Credit 3 units.
Typical periods offered: Fall, Summer

MKT 7740 Market and Consumer Focus
This course focuses on key data-driven marketing strategies and tactics that enable a business to attract, satisfy, and retain customers. Using these strategies, and investing in marketing, allows the firm to create real customer value while growing profitability. You will learn how to identify your target market, and how to position your product or service so that it meets your customers' wants and needs, all in the context of your and your firm's values. You will understand how to offer the right products or services to customers, at the right prices, using the right marketing communications and promotions, and delivered through the right channels.
Credit 3 units.
Typical periods offered: Spring

MKT 8201 Empirical Methods in Business: Part A
The objectives of this course are to train PhD students in different business disciplines to understand how to use data to address research questions, how to build econometric models that can be applied to data, and how to estimate the econometric models using some statistical packages. This course emphasizes on empirical data handling and estimation issues. Pre-requisites: students are expected to have basic statistical knowledge such as random variables and distributions, tests of statistical hypothesis, basic linear regression and maximum likelihood estimation.
Credit 3 units.
Typical periods offered: Fall

MKT 8602 Consumer Behavior II
Consumer Behavior II is the second half of a two-part PhD level course on consumer behavior. However, either part I or part II can be taken independently of the other part. This course will essentially cover the second half of topics from the Handbook of Consumer Psychology.
Credit 1.5 units.
Typical periods offered: Fall

MKT 8630 Experimental and Behavioral Research Methods Part A
This half-semester research methods course will focus on experimental design, causal inference and data reliability, Students will gain a strong background in current experimental methods and data integrity issues, and will have opportunities to practice designing experiments and experimental stimuli. Students will also have the opportunity to evaluate published experimental research. The course will be relevant to all PhD students whose research incorporates experiments, including but not limited to, students in Marketing, Organizational Behavior, Strategy, Psychology and Social Work.
Credit 1.5 units.
Typical periods offered: Fall

MKT 8631 Experimental and Behavioral Research Methods Part B
This half-semester research methods course will focus on experimental design, causal inference and data reliability. Students will gain a strong background in current experimental methods and data integrity issues and will have opportunities to practice designing experiments and experimental stimuli. Students will also have the opportunity to evaluate published experimental research. The course will be relevant to all PhD students whose research incorporates experiments, including but not limited to, students in Marketing, Organizational Behavior, Strategy, Psychology and Social Work.
Credit 1.5 units.
Typical periods offered: Fall

MKT 8670 Doctoral Seminar in Marketing
This course is an advanced seminar of doctoral level standing. The course is aimed at students pursuing a degree in business, economics or other disciplines interested in learning about the state of the art in analytical and empirical models in marketing. The objective of this course is to study analytical and empirical models and methods used in marketing to understand and predict the behavior of market participants, viz., consumers, and firms and to examine generalizations of such behaviors from a number of studies. The topical coverage in this seminar will vary from year to year.
Credit 3 units.
Typical periods offered: Fall

MKT 8673 Analytical Modeling in Marketing
This Ph.D. level seminar provides an overview of analytical models in marketing as well as an in-depth discussion of game theory topics frequently used in Economics and Marketing literature. The seminar consists roughly of two parts. The objective of the first part is to achieve understanding, justification, and intuition for the commonly used equilibrium concepts and ideas in game theory, such as Nash, Bayesian Nash, and Markov-perfect equilibria, and sub-game perfection. The objective of the second part is to study how these concepts have been used in the current business and economics literature, with some emphasis on the area of Marketing. The topics and methodology covered in this seminar could be of interest to doctoral students in Business, Economics, and Political Science.
Credit 1.5 units.
Typical periods offered: Spring

MKT 8674 Judgment and Decision Making
This seminar examines selected research in judgment and decision making, covering fundamental research in psychology as well as research on consumer and managerial decision making. The course is grounded in behavioral decision research. The topics may be of interest to doctoral students studying related topics in business, psychology, economics, social work, and political science. This seminar will examine classic works on judgment and decision making and also focus on more contemporary issues. The primary course objectives are to: (a) provide a selective but intensive exposure to research in key theoretical, substantive, and methodological areas in judgment and decision making; (b) understand and explore both the normative and descriptive principles that govern decision making; (c) develop a critical perspective that enables students to identify opportunities for theoretical advances, methodological innovations, and relevant applications in this area; and (d) equip students to conceptualize, design and implement original research on decision making. The course topics and readings will be rotated on a two-year cycle to allow students to take the course more than once.
Credit 3 units.
Typical periods offered: Spring

MKT 8675 Empirical Methods in Structural Modeling
This course will deal with structural econometric models of consumer and firm behavior. Each lecture will discuss modeling and estimation issues pertaining to one stream of research in this area. The focus of the course will be mainly on recent, state-of-the-art papers although the perspective of older, classic papers will be provided as and when appropriate.
Credit 1.5 units.
Typical periods offered: Fall

MKT 8730 Analytical Modeling in Marketing: Part A
This Ph.D. level seminar provides an overview of analytical models in marketing as well as an in-depth discussion of game theory topics frequently used in Economics and Marketing literature. The seminar consists roughly of two parts. The objective of the first part is to achieve understanding, justification, and intuition for the commonly used equilibrium concepts and ideas in game theory, such as Nash, Bayesian Nash, and Markov-perfect equilibria, and sub-game perfection. The objective of the second part is to study how these concepts have been used in the current business and economics literature, with some emphasis on the area of Marketing. The topics and methodology covered in this seminar could be of interest to doctoral students in Business, Economics, and Political Science.
Credit 1.5 units.
Typical periods offered: Spring

MKT 8741 Judgment and Decision Making: Part B
This seminar examines selected research in judgment and decision making, covering fundamental research in psychology as well as research on consumer and managerial decision making. The course is grounded in behavioral decision research. The topics may be of interest to doctoral students studying related topics in business, psychology, economics, social work, and political science. This seminar will examine classic works on judgment and decision making and also focus on more contemporary issues. The primary course objectives are to: (a) provide a selective but intensive exposure to research in key theoretical, substantive, and methodological areas in judgment and decision making; (b) understand and explore both the normative and descriptive principles that govern decision making; (c) develop a critical perspective that enables students to identify opportunities for theoretical advances, methodological innovations, and relevant applications in this area; and (d) equip students to conceptualize, design and implement original research on decision making.
Credit 3 units.
Typical periods offered: Spring

Organizational Behavior

OB 5000 Foundations for Impactful Teamwork I
Meaningfully contributing to, building, and leading collaborative efforts —from small project-based teams to larger functions and divisions— is foundational to a rewarding and impactful career. The purpose of this course is to lay a foundation of interpersonal skills and systems thinking that will enable you to differentiate yourself as a valued-adding member and leader of organizations. The specific learning objectives for this course are to: 1) Deepen your understanding of yourself – as a social, emotional, cultural being, including your strengths, the contexts in which you thrive, and the areas where you are most interested in growing and developing during your MBA program. 2) Evaluate the aspects of your identity and personal experiences that shape how you interact and engage with others and how they interact and engage with you in organizations. Extend your appreciation how to create equitable and inclusive teams that leverage a diversity perspectives and skillsets. 3) Develop your skills as a contributor to and leader of project-based teams. This includes sharpening your understanding of the core elements of team design and how leaders and team members alike can promote effective team processes. The course includes two complementary sessions: This first session is an intensive introduction to the core components of team formation, at the start of the MBA program.
Credit 1.5 units.
Typical periods offered: Fall

OB 5002 Women in Leadership
In this course, we will take a multi-faceted approach to learning about women and leadership to better prepare students to lead in organizations. To do this we will learn from notable leaders who will share their experiences and advice with the class. These conversations will be supplemented with cases and readings of women leaders pulled from a range of organizations as well as a review the current state of empirical evidence about the status of women as leaders. Finally, there will be time to engage in deep reflection about what students expect from their careers, as well as a chance to consider the pathways they must take to become effective and inclusive leaders in increasingly diverse organizations.
Credit 1.5 units.
Typical periods offered: Fall

OB 5230 Politics and Power in Organizations
The use of power and politics is inevitable in modern organizations - and the higher one goes the more of it one encounters. Therefore, the development of real competency in managing power and influence can materially enhance career progression. The objective of this course is to develop such competency using learner-centered instruction, which includes actual application of concepts through class discussion of case histories and the use of a learning journal. The content of the course includes why power and politics occur, when are they particularly prevalent, what are the sources of power, how to build power throughout one's career, common influence tactics, the importance of political fit in job search, and how to avoid political mistakes in a new position.
Credit 3 units.
Typical periods offered: Fall, Spring, Summer

OB 5240 Negotiation
Managers spend the majority of their time negotiating, from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the toolbox of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations and to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and for resolving conflict in a variety of settings. The course format will involve simulated negotiations as well as experiential exercises, cases, discussion, and lectures. Students will be evaluated on the basis of case analysis, negotiating performance, and a final project. Students may not take both this course and OB 561 for credit. This course covers topics in greater depth than the shorter OB 561 course; offers more opportunities for hands-on practice, learning, and feedback; and covers a wider range of additional topics.
Credit 3 units.
Typical periods offered: Fall, Spring, Summer

OB 5250 Human Resources Management
Emphasis on development of attitudes and skills of managers and supervisors in solving human problems and in building and maintaining effective employer-employee relations. Major topic areas include selection and placement, training, and compensation. Other topics include legal aspects of employment policies, labor relations, and other aspects of human resources management.
Credit 3 units.
Typical periods offered: Spring

OB 5270 Human Resource Strategies for General Managers
This course will provide a basic understanding of how to gain competitive advantage through developing the right human resource strategy for the business. It will begin with a consideration of how to link the people strategy to the business strategy, move through a discussion of segmenting and analyzing the workforce, and then cover the contribution of human resource functions in creating the right environment to motivate the highest levels of performance. This course is designed for students with full-time work experience. Students without pre-MBA work experience should take the course in year two after completion of a summer internship.
Credit 1.5 units.
Typical periods offered: Fall

OB 5300 Creative Thinking and Leading the Creative Organization
This course is for students who want to improve their ability to develop creative solutions to tricky problems and to lead in a way that fosters creativity in others. Data suggest that the ability to solve problems in new and better ways is one the leadership skills that is increasing in importance and that will set you apart from your peers. Future leaders who have mastered the skills of creativity and can foster those skills in others are therefore in a position to add tremendous value to their firms and, ultimately, to society. This course is designed to help you understand and begin to master those skills.
Credit 1.5 units.
Typical periods offered: Fall

OB 5340 Talent Analytics
Finding, developing, and retaining the best talent has always been the key to sustained success in business. Organizations today have potential access to far more useful information about people than ever before but most struggle to access and use it effectively. In a highly competitive global market, rigorously analyzing data to enable timely, strategic decisions about talent provides a critical edge. In this course you will learn how to use analytics to bring data and rigorous modelling to bear on people-related issues, such as recruiting, performance evaluation, leadership development and succession, job design, and compensation. Together, these can help organizations achieve long range strategic goals, rather than simply serving as an administrative support function.
Credit 1.5 units.
Typical periods offered: Spring

OB 5350 People Metrics
Metrics are at the core of people analytics. The purpose of this course is to introduce students to the foundations of assessing behavior in organizations using novel measurement approaches and large datasets. Through classroom discussions and real-world applications, this course will enable students to add value to organizations through the development, use, and interpretation of innovative people metrics. Specifically, after taking this course, you will be able to do the following: 1) Develop a clear and logical conceptual measurement model. A conceptual measurement model is the foundation of creating novel and useful new approaches for assessing intrapersonal characteristics (e.g., personality) and interpersonal behavior (e.g., knowledge sharing, teamwork). 2) Identify novel sources of data for innovative people metrics. Organizations are awash in the traces of individual behavior and social interactions. Decoding how data that already exist in an organization can be used to understand behavior is an essential skill for adding value in the field of people analytics. 3) Apply a rigorous process for validating new people metrics. Developing a measurement model and finding sources of data are necessary but insufficient for adding value through people metrics. New measures must be validated.
Credit 1.5 units.
Typical periods offered: Spring

OB 5603 Leading Across Differences
Given the challenges that we face locally both nationally and globally, managers need to develop the necessary skills to thrive socially and professionally in diverse contexts and communities. Most successful managers are able to incorporate and capitalize on the diversity of their employee population. However, by its nature, diversity means that we have different points of view, different values, different understandings and ways of knowing, different cultures and nationalities, and different ideas about how to measure and implement success and other factors in our organizations. Failure to incorporate and value those diverse voices can lead to conflict, negative press, turnover and poor performance in organizations and leave us paralyzed. Alternatively, we can capitalize on our diversity instead of letting it divide us. In so doing, we incorporate more points of view in our thought processes, consider novel alternatives, enhance creativity and performance, and incorporate all of our human assets by focusing on the basic values of equity, equality and inclusion. In this course, we will explore the impact of diverse organizational and multicultural contexts, with topics relevant to the workplace and our interactions, perceptions, and outcomes by exploring difference in terms of nationality, ethnicity, age, cultural values, gender differences, sexual orientation and different abilities. We take an interdisciplinary approach to the topic of diversity and inclusion. We will highlight diversity, equity and inclusion from the perspective of areas within business, law, and sociology. As we cover each topic area, we will juxtapose specific business practices and their impact (or lack thereof) on members of a diverse organization. We will also attend to the impact of different perspectives in terms of how business practices may be viewed by diverse employees, customers and stockholders. Our agenda will be accomplished in discipline-specific segments, where we examine a specific topic/ business practice and its impact on various constituencies, identities and organizational outcomes. Students can expect discussions that at times involve conflicting ideas and positions. These discussions should be approached with humility and respect, and students should be courteous and professional.
Credit 3 units.
Typical periods offered: Fall, Spring

OB 5610 Negotiation and Conflict Management
Managers spend the majority of their time negotiating--from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the toolbox of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations, to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and resolving conflict in a variety of settings. Course format will involve simulated negotiation and experiential exercises, cases, discussion, and lecture. Students will be evaluated on the basis of case analysis, negotiating performance, a final project and participation. Students are expected to participate in all negotiation exercises.
Credit 1.5 units.
Typical periods offered: Fall, Spring

OB 5620 Leadership Competence
This course introduces theories of leadership that identify critical traits, skills, and behaviors typical of successful leaders, with a specific focus on developing competencies in the upcoming internship or career. Participants will review assessments of their own traits, dispositions, behavioral orientations, and social networks in light of contemporary frameworks for effective leadership. Competence in applying these frameworks will be developed through the development of cases and their analysis in leadership workshops. In addition, course participants will engage in constructive leadership development training both as coaches and recipients. Based on this feedback, participants will prepare an individual leadership development plan. PMBA prerequisite: OB 5601 or permission of instructor. MBA prerequisite: OB 5620 or permission of instructor.
Credit 1.5 units.
Typical periods offered: Fall, Summer

OB 5650 Leading Change
At work and throughout life, change happens. It often happens in fits and starts, as organizations and their members resist it. It can also happen more smoothly. Rapidly, even. The purpose of this course is to help you learn how to reduce resistance to change and produce changes more effectively within organizations - and within yourself. This course integrates cutting-edge academic research with cases and activities designed to strengthen your understanding of the course concepts and help you practice putting them into action. By the end of this course, you should be equipped to navigate a wide range of change-related challenges you will encounter throughout your career.
Credit 1.5 units.
Typical periods offered: Fall, Spring

OB 5660 Leadership in the Trenches
This course comprises two modules of critical importance to top management teams. The first module deals with Corporate Strategy: how a multi-business corporation allocates resources and coordinates across its business lines to achieve the corporate goals. The second module deals with Global Strategy, strategic decisions not only in globalizing your own firm, but also in competing/collaborating with global firms.
Credit 1.5 units.
Typical periods offered: Fall, Spring

OB 5685 Mindfulness and Performance in the Workplace
Throughout corporate America and contemporary society, we frequently hear people touting the value of mindfulness. What exactly is this concept - and how can it foster performance in the workplace and improve the quality of workers' lives? This course addresses these questions. More specifically, this course examines a large and growing body of research on mindfulness and mindful organizing and incorporates a number of cases and activities designed to hone your attention-related skills and highlight applications of the course material. By the completion of the course, you should be finely attuned to the nature and relevance of mindfulness for organizations and their members - and able to think and behave more mindfully on an everyday basis.
Credit 1.5 units.
Typical periods offered: Fall, Spring

OB 5720 Defining Moments: Lessons in Leadership and Character From the Top
Most successful leaders can point to a handful of defining moments in their careers - key choice points that defined the trajectory of their character, their career, and/or their company. What are those defining moments and why do they matter? How can aspiring business leaders prepare themselves to face their defining moments with insight and integrity? This course examines these questions by learning from notable leaders who exemplify both business excellence and personal character. Top executives from leading companies will sit down with us to talk about their defining moments and to engage with us in considering these questions. These conversations will be supplemented with second year MBA students; PMBA and EMBA students must have core courses completed.
Credit 1.5 units.
Typical periods offered: Spring

OB 6301 Organizational Research Methods
This is a required couse for Ph.D. students
Credit 3 units.
Typical periods offered: Fall, Spring

OB 6523 Power, Politics and Influence
The use of power and politics is inevitable in modern organizations - and the higher one goes the more of it one encounters. Therefore, the development of real competency in managing power and influence can materially enhance career progression. The objective of this course is to develop such competency through the use of learner - centered instruction, which includes actual application of concepts through class discussion of case histories and the use of a learning journal. The content of the course includes: why power and politics occur; when are they particularly prevalent; what are the sources of power; how to build power throughout ones career; common influence tactics; the importance of political fit in job search, and; how to avoid political mistakes in a new position. This course is for PMBA, Online MBA and Flex MBA students.
Credit 3 units.
Typical periods offered: Fall, Spring, Summer

OB 6524 Negotiations
Managers spend the majority of their time negotiating, from negotiating schedules and vacation time to negotiating resource allocations to negotiating mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the toolbox of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations and to analyze, plan, and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and for resolving conflict in a variety of settings. The course format will involve simulated negotiations as well as experiential exercises, cases, discussion, and lectures. Students will be evaluated on the basis of case analysis, negotiating performance, and a final project.
Credit 3 units.
Typical periods offered: Fall, Spring

OB 6537 Teamwork and Leading Organizations
Skillfully contributing to, building, and leading collaborative efforts-from small project based teams to larger functions and divisions-will enable you to have an impact throughout your career. The purpose of this course is to lay a foundation of interpersonal skills and systems thinking that will enable you to differentiate yourself as a valued-adding member and leader of organizations. The specific learning objectives for this course are to develop your skills as a contributor to and leader of project-based teams. This includes sharpening your understanding of the core elements of team design and how leaders and team members alike can promote effective team processes. Develop your skills as a leader in and of organizations. This comprises being able to architect a system-its structure, work design, culture, and people management practices-to execute a given strategy, within a given environment. At the conclusion of this course, you will be able to independently transfer your learning to design, launch, and lead project-based teams in a manner that (a) meets or exceeds stakeholder's expectations for task performance; (b) contributes to the growth of individual team members; and, (c) leaves team members willing to work together again in the future; systematically analyze an organization's architecture, assessing its internal congruence and its utility for executing a given strategic approach, either when engaged in early organizational design (e.g., scaling a start-up team) or when diagnosing the reasons for unsatisfactory organizational performance.
Credit 3 units.
Typical periods offered: Fall, Spring

OB 6565 Leading Change
At work and throughout life, change happens. It often happens in fits and starts, as organizations and their members resist it. It can also happen more smoothly. Rapidly, even. The purpose of this course is to help you learn how to reduce resistance to change and produce changes more effectively within organizations - and within yourself. This course integrates cutting-edge academic research with cases and activities designed to strengthen your understanding of the course concepts and help you practice putting them into action. By the end of this course, you should be equipped to navigate a wide range of change-related challenges you will encounter throughout your career.
Credit 1.5 units.
Typical periods offered: Fall, Spring

OB 7170 Leadership
The leadership course draws from behavioral science research and informed professional practice to provide a focused experience in executive leadership development. The intent is to be conceptually rigorous in the critical examination of how various perspectives explain the relationship between leadership and organizational outcomes, yet also to offer participants meaningful opportunities for the development of a portfolio of useful leadership competencies.
Credit 3 units.
Typical periods offered: Spring

OB 7210 Organizational Behavior and Design
Taking the perspective of organizational leaders, we will address some of the most vexing organizational challenges. These include how you can bring out the best in people, compelling them to go above and beyond the call of duty to get the job done; considering ways to systematically avoid biases when making strategic decisions; designing a structure that enables strategy execution; creating a strategically relevant culture that aligns employees' interests with organizational objectives and promotes innovation; determining how to lead teams of diverse professionals; and wrestling with how to make difficult decisions from a position of personal and professional integrity. We will focus on the processes necessary to organize, motivate, and lead people engaged in collective activities and develop concepts and strategies that will help you to become a more effective leader. To accomplish these goals I have selected readings, cases, exercises, and videos to stimulate discussion and illustrate the conceptual and applied aspects of individual, group, and organizational behavior. Some of these materials focus on situations specific to India and organizations operating in the Indian market; others represent global wisdom and best practices. Throughout, though, the focus will be on making the materials and topics relevant to you and your career.
Credit 3 units.
Typical periods offered: Spring

OB 7250 Managing Power & Influence in Organizations
Exercising leadership requires more than just a worthy goal or a good idea. It also requires an understanding of how things really get done in organizations and how you can influence people both within and outside your chain of command in order to gain support and overcome resistance. In other words, it requires skill at leading through influence. This seminar will help you develop the three key skills of leading through influence: a) navigating politics, b) understanding power, and c) exercising influence.
Credit 3 units.
Typical periods offered: Fall, Summer

OB 7260 Team Development and Assessment
Develops the conceptual tools and basic skills needed to manage people in organizations. Considers the basic problems that confront every manager: communicating effectively, negotiating sound agreements that build lasting relationships, managing the inevitable conflicts that arise in every organization and exercising leadership in work teams.
Credit 1.5 units.
Typical periods offered: Fall

OB 7270 Negotiations and Conflict Management
Managers spend the majority of their time negotiating - from schedules and vacation time to resource allocations to mergers and major policy decisions and their implementation. Skillful negotiation is a critical component of the toolbox of the successful manager. The purpose of this course is to improve students' abilities to diagnose conflict situations and to analyze, plan and conduct negotiations. The course material addresses negotiation as an effective means for implementing decisions and strategies and resolving conflict in a variety of settings. Course format will involve simulated negotiation and experiential exercises.
Credit 1.5 units.
Typical periods offered: Fall

OB 7280 Communication & Negotiation Skills
This course should provide executives with skills they need to succeed in any working environment, and day-to-day life; language skills for real-life business situations; and an opportunity to capitalize on personal style for more effective communication. Negotiation is a highly flexible approach for resolving conflicts, working out the terms of exchange, and building collaborative relationships. Skillful negotiations is therefore an essential aspect of executive's role. The course will also cover the foundations on effective negotiation skills, key negotiation concepts of evaluating alternatives, interests, and parties and the various negotiation styles.
Credit 3 units.
Typical periods offered: Summer

OB 7310 Teams & Collaboration
Teams have become ubiquitous in contemporary organizations, especially in circumstances when organizations are trying to tackle complex problems. All too often, however, teams do not deliver the anticipated results. The goal of this course is to introduce a framework for successful team design and leadership. The course will offer theoretical insights into the science of teams based on cutting-edge research as well as the opportunity to practice some team design and leadership tools firsthand. The course focuses on the processes necessary to organize, motivate, and lead people engaged in collective activities and on the strategies that will help students to become more effective leaders.
Credit 3 units.
Typical periods offered: Summer

OB 7400 Creative Thinking
According to the *World Economic Forum*, creative thinking is one of the skills that is only becoming more important in our rapidly changing and highly interdependent world. Creativity entails the generation of new ideas that have the power to better address existing or newly identified problems or opportunities. Leaders who have mastered skills such as associative thinking, the main driver of new ideas, or experimenting, a keyway to generate data to (in)validate one's ideas and can foster those skills in others are therefore in a position to add great value to their firms and, ultimately, to society. The purpose of this course is to help you master those skills and deploy them in a manner consistent with your personal values while honoring societal responsibilities.
Credit 1.5 units.
Typical periods offered: Spring

OB 7410 Global Leadership and Organization
This course provides tools, frameworks, and processes to help you understand unique opportunities for leading and building organizations across cultural differences. Throughout the course, we will focus on many questions, including: 1. What are the most relevant frameworks for understanding cultural differences across peoples and groups, and what implications do they hold for building organizations to optimize around such differences? 2. What is required of me as a leader as I seek to manage across cultural differences, whether those differences exist within or across global boundaries 3. What are the principles and practices that make for high functioning global teams, and how can these be built into my team?
Credit 1.5 units.
Typical periods offered: Spring

OB 7460 Values-Based, Data-Driven Leadership
The purpose of Part 1: Values-Based/Data-Driven Leadership is to lay the foundation for each student's EMBA leadership development journey by 1) introducing a framework that will be used to organize and focus their leadership development and coaching efforts throughout the EMBA program, 2) elaborating and illustrating the importance of values/purpose and data for effective leadership, and 3) helping students understand and commit to a process for their own leadership development throughout the EMBA program (and beyond). On completion of this first module of the Leadership Development course, students will be prepared to start working with their personal executive coach to discuss strengths, identify developmental needs, and set goals.
Credit 1.5 units.
Typical periods offered: Fall

OB 7470 The Power of Purpose
The purpose of Part 2: The Power of Purpose is to 1) understand the critical importance of higher purpose for leader and organizational effectiveness, 2) work with colleagues to begin developing a statement of leader higher purpose, 3) understand the role of leaders in developing others (and launch peer coaching groups as a venue in which to practice), and 4) process individual and team feedback from the first-half teams and set goals for second-half teams.
Credit 1.5 units.
Typical periods offered: Summer

OB 7480 Values-Based, Data-Driven Leadership III
The purpose of Part 3: Your Leadership Development Journey is to 1) meet with peer coaches to give and receive feedback on the first draft of the leadership development plan, 2) process individual and team feedback from the second-half teams, 3) reinforce commitment to leader higher purpose by sharing statements with others, and 4) commit to a process of lifelong learning and personal development.
Credit 1 unit.
Typical periods offered: Spring

OB 7500 Organization Leadership and Influence
Exercising organizational leadership requires more than just a worthy goal or a good idea. It also requires an understanding of how things really get done in organizations and how you can influence people both within and outside your chain of command in order to gain support and overcome resistance. In other words, it requires skill at leading through influence. This seminar will help you develop the three key skills of leading through influence: a) navigating politics, b) understanding power, and c) exercising influence.

Credit 3 units.

Typical periods offered: Fall

OB 8610 Field Research Methods

This course will immerse students in the discipline and practice of research on organizations in the wild. Through readings, class discussions and -- most importantly -- student experiences embedded within an organization throughout the semester, students will use reflective memos and feedback from faculty and classmates to develop an initial mental model of what it means to develop and advance research projects that are grounded both in theory and in how real organizations operate today.

Credit 3 units.

Typical periods offered: Spring

OB 8626 Negotiation & Conflict Management

This course will critically examine current theory and empirical research on social conflict, negotiation, and bargaining. Our objective will be to prepare participants in the seminar to become effective researchers in this field of study. Classes will be student driven with a focus on discussion and critical debate. All students will be expected to contribute actively to the discussions during each class period. The final deliverable for the course will be a research project on some significant aspect of conflict and negotiation.

Credit 3 units.

Typical periods offered: Fall

OB 8635 Research as a Generative Process

The objective of this course is to help students develop the skills surrounding the most critical aspects of producing and disseminating research that precede data collection and that emerge following data analysis. In other words, this seminar focuses on the most generative aspects of the research process: formulating problems, generating ideas, building theory, engaging readers, and presenting work to various audiences. As such, this course addresses critical -- though often underappreciated -- aspects of empirical research (and its reporting) as well as all pertinent aspects of conducting and communicating theoretical research (i.e., conceptual papers). This course is designed to complement and enrich other seminars in the PhD program, most notably Organizational Research Methods and Field Research Methods. Connections to these seminars will become evident during the term.

Credit 3 units.

Typical periods offered: Spring

OB 8640 Seminar On Social Hierarchy Organizational Behavior

The purpose of this seminar is to examine the implications of social hierarchy, or stratification in power and status within a social group, for phenomena of central interest in the field of organizational behavior. We will examine the implications of social hierarchy for topics such as conflict, negotiation, learning, creativity, interpersonal perception, emotion, diversity, and leadership.

Credit 3 units.

Typical periods offered: Fall

Supply Chain, Operations, and Technology

SCOT 5050 Boeing Center Supply Chain Practicum

This practicum project will be a semester-long collaborative process between a Boeing Center client and a team of student consultants, whose goal is to solve a key problem faced by the firm. The project is created to provide the client with an outside, unbiased perspective on a matter of operational or strategic importance. If you think you see an immediate solution, the client is probably already aware of it. The client engages us for help because they are indeed facing a problem that requires a lot of work, so we should not quickly jump to conclusions. It is not just a simple school assignment that can be completed within a matter of days. As professionals-in-training, students will be evaluated for their job performance. Assessment criteria include quality of work, ability to meet deadlines, meeting participation, communication, teamwork, work ethic, and so on. The faculty adviser and PhD lead will provide students with analytical guidance and advice to facilitate project progression. The project manager and fellow will maintain client relationships, coordinate the logistics of client and internal meetings, and ensure that the team is performing up to expectations. Each task assigned is a building block for overall deliverables, which require the thorough and creative thinking of participating students.

Credit 1.5 units.

Typical periods offered: Fall, Spring

SCOT 5100 Operations Management Foundations

This course discusses the main principles and concepts in managing operations for competitive success. Among the topics covered are: Operations strategy, capacity analysis and organization, queuing theory, service management, quality management, inventory management, and a brief introduction to supply chain management. Students learn the basics of how to manage the operations of a firm, with the main goal of this course being to prepare students for advanced coursework in operations and supply chain management, beginning in the Fall A term. Most sessions consist of in-depth case discussion, integrated with theory. This course is available only to students entering the MS/Supply Chain Management or MSSCA program. You are not able to self-register for this course, it is admin registration only.

Credit 2 units.

Typical periods offered: Fall, Spring, Summer

SCOT 5300 Supply Chain Analytics Capstone

This course is intended for MSSCA graduating students. Students will apply, in an integrated and hands-on fashion, the various analytics skills acquired during the program to realistic, data-intensive, business cases and projects.

Credit 3 units.

Typical periods offered: Fall

SCOT 5310 Supply Chain Finance

This course focuses on understanding ways to better integrate operational and financial decisions within a supply chain. Our studied firms and world-class practices better integrate physical and financial flows by endogenizing not only the operational choices of the firm and its agents but also their financial decisions. Students will better understand how to make informed decisions using all relevant analytics tools at the interface of operations, finance and risk management. There are three main topics the course will explore: Supply Chain Financing: Understand how capital constraints of firms in a supply chain affect their operational choices, and what are better ways to finance working capital needs of a firm in a supply chain, when fully accounting for the operational and risk management implications of such solutions. The financing solutions that will be explored are divided into supplier led (e.g., trade credit) and buyer led (e.g., reverse factoring). Supply Chain Contracting in the presence of Financial Frictions: Study the effect of financial frictions (e.g. limited working capital, transaction costs, taxes, bankruptcy costs) on contracts and

the implementation of operational strategies. The contracting issues to be explored within a supply chain finance setting are incentive coordination among firms in the chain, information asymmetries, and moral hazard issues. Integrated Operational and Financial Risk Hedging: Understand how operational and financial risks in global supply chains interact (e.g, exchange rates, commodity procurement risks, etc.), and what combination of operational and financial tools can be used to effectively manage those risks.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5500 Project Management
Change management has become synonymous with project management, since organizations that want to change their focus or direction increasingly recognize that introducing new products, processes, or programs in a timely and cost effective manner requires professional project management. This course analyzes complex projects and discusses available tools for managing them. Some of the topics covered include life cycle models, project selection, project monitoring and control, planning with uncertainty, project risk management, the critical chain method, and managing multiple projects. It also discusses commercial project management software and how to overcome its limited functionality to address the requirements of managing risky complex projects in practice. Students learn project management skills that will be useful throughout their careers. As such, this course is essential for current or future managers regardless of their career concentration.
Credit 3 units.
Typical periods offered: Fall, Spring

SCOT 5501 Supply Chain Risk Management
Many events in the last few years made supply chain managers keenly aware of the multiplicity and diversity of risks affecting them, from fluctuating commodity prices, unstable currencies, hurricanes and earthquakes, fires, terrorist attacks, contaminated material sourced from developing countries, and suppliers going bankrupt in tight financial credit environments. Building a functional supply chain requires careful planning and consideration of a variety of disruption risks, and it is of paramount importance to integrate management of physical flows and financial hedges when dealing with such risks. Companies that effectively manage their supply chain risks enjoy a level of robustness (flexibility) and resilience disruption-proof-ness) that affords them significant competitive advantage. This course will develop a comprehensive risk management framework for complex supply chains and introduce students to all needed decision tools for supply management and risk hedging. In addition, it will outline a portfolio of proven strategies to assess, reduce, hedge, and mitigate supply chain risks.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5502 Advanced Topics in Logistics and Supply Chain Management
Fast-changing consumer demand, the Internet and digital technology, growing competitive pressures, and globalization create new opportunities and challenges on how firms can efficiently deliver the right product to the right place at the right time. Practitioners have responded to drastic market changes through various innovative strategies such as supply chain redesign. These challenges have also attracted significant academic attention and inspired new supply chain research. This course focuses on advanced topics in logistics and supply chain management that are of interest to managers, consultants, and researchers. Students will gain exposure to state-of-the-art knowledge about these topics by attending seminar sessions given by both industry and academic speakers.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5503 Supply Chain Analytics: Stochastic Models
This course covers the two key types of simulation models of uncertain events: Monte Carlo simulation and Discrete Event Simulation. The conceptual difference between these two simulation methodologies is in their treatment of time. Discrete Event Simulation is used to model dynamic systems where events occur at specified, random, time. In Monte Carlo simulation the timing of events is typically inconsequential. Upon successful completion of this course, students will demonstrate competency in formulating and analyzing stochastic models using state-of-the-art simulation software. They will become proficient with software tools like Arena for Discrete Event Simulation and Crystal Ball for Monte Carlo simulation. The course emphasizes proficiency in using software tools to analyze models rather than theory.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5568 Business Management with SAP 1
This course introduces students to the concepts of Enterprise Resource Planning systems, and the integrated business processes which ERP systems support. These processes include sales and operations planning, materials management, manufacturing requirements planning, and financial reporting. Cross-functional business processes, such as Order-to-Cash, integrate sales and distribution, materials management, and financial accounting. The ERP system provides a roll-up to financial reporting systems which is essential for cost management and control. This course introduces participants to integrated business processes through the application of SAP modules supporting Sales and Distribution (SD), Materials Management (MM), Financial Accounting (FI), Production Planning (PP), and Controlling (CO) as components of the SAP integrated business solution. This is a hands-on workshop type of class which enables you to learn the business processes which SAP-ERP supports. The class provides opportunities for problem-solving, collaboration, and active learning. The Enterprise Systems course will enable you to acquire the skills and knowledge needed for roles as business analysts, configuration specialists, and consultants. This skill set provides significant opportunities to increase your value for roles as enterprise architects, business systems analysts, IT project managers, and information systems specialists in accounting/finance, sales/distribution, human resources, production planning, materials management, and supply chain.
Credit 1.5 units.
Typical periods offered: Fall Half A, Fall

SCOT 5580 Advanced Operations Strategy
Examines major issues of operations policy from a strategic perspective. Covers productivity measurement, process choice, product profiling, interfaces with marketing, experience costs, process positioning, accounting and financial perspectives, and international operations. Gives equal attention to service operations and manufacturing operations. Valuable for students with an operations or general management focus, as well as for finance and marketing students.
Credit 3 units.
Typical periods offered: Fall

SCOT 5590 Managing Business Process Outsourcing for Competitive Advantage
The growth of global outsourcing of all types of business processes (from manufacturing to research and development, engineering, call centers, clinical trial tests, IT, accounting, human resources, etc.) with third party contracting organizations has been heralded a by the popular and academic press as the most important business trend

of the last decade. As a result of such strategic trends and actions, it becomes essential to strategically manage global business process outsourcing as a key business process by itself, and this to hire and train managers that fully understand the tradeoffs, implementation challenges, approaches for managing risks and more importantly, able to manage the business relationships with third party contracting organizations. This course is intended to provide the fundamental skills necessary to become successful, global managers of virtual value chains who, when faced with outsourcing decisions, can competently make them within the context of their firms' strategy as well as effectively execute all aspects of the outsourcing process while managing the outsourcing relationship with suppliers.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5630 AI for Managers
This course is designed for MBA students at Olin and select non-Olin WashU Master's students. No prior programming, computer science, or engineering experience is required. The course, however, covers a lot of technical ground at a rapid pace. We cover it a high, but precise, level suitable for managers, executives, and entrepreneurs. You will spend 1-2 hours preparing for each class. You will also spend an average of 1-2 hours after each class reviewing and working on assignments.
Credit 1.5 units.

SCOT 5702 Introduction to Revenue Management
The term quantitative pricing and revenue analytics collectively refers to the set of practices and tools that firms in various industries use to quantitatively model consumer preferences, segment their market, and tactically optimize (often in a microtargeted or personalized manner) their product assortment, pricing, and promotion strategies. The origins of this field, which is often referred to as revenue management, were in the airline industry during the late 1980s. The prototypical question is how a firm should set and update pricing and make product availability decisions across its various selling channels in order to maximize its profitability. In the airline industry, tickets for the same flight may be sold at many different fares, and availability may change as a function of purchase restrictions, forecasted future demand, and the number of unsold seats. The adoption of such systems has transformed the transportation and hospitality industries, and it is increasingly important in retail, telecommunications, entertainment, financial services, health care, and manufacturing as well as online advertising, online retailing, and online markets. In parallel, pricing and revenue optimization has become a rapidly expanding practice in consulting services and a growing area of software and IT development. The ultimate goal of this course is for students to learn to identify and exploit opportunities for revenue optimization in different business contexts. The topics covered in this course are either directly or indirectly related to customer segmentation, demand modeling, and tactical price optimization.
Credit 1.5 units.
Typical periods offered: Fall

SCOT 5704 Operations Management
This course discusses the main principles and concepts in managing operations for competitive success. Among the topics covered are operations strategy, capacity analysis and organization, queuing theory, service management, quality management, inventory management, and a brief introduction to supply chain management. Students learn the basics of how to manage the operations of a firm, and how operational issues affect and are affected by the many business decisions they will be called upon to make or recommend in their careers. Most sessions consist of in-depth case discussion, integrated with theory.
Credit 3 units.
Typical periods offered: Fall

SCOT 5720 Strategic Quality Management
Discusses the theory and practice of quality management in the business world. Covers operations and marketing issues that are typical for manufacturing and service organizations, a cross-functional perspective emphasizing the interactions between the operations and marketing decisions. Topics include quality strategies and competition; organization and incentives for quality enhancement (the approaches of Crosby, Deming, Feigenbaum, Ishikawa, and Juran); quality-function deployment; process mapping; and the role of top management.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5730 Operations Management in the Service Industry
The service industry is of vital importance to today's economy. Through a greater understanding of the design and operation of services, productivity improvements can be achieved which result in real growth. We will discuss important issues in the operations of major service providers such as hotels and restaurants, airlines, retailers, and health care providers covering topics including process (re-)design; capacity and demand management, queueing theory, customer behavior, performance measurement, and AI-enabled transformations. The course will approach services from an operations management viewpoint, though related aspects of strategy, technology, and organization will be discussed.
Credit 1.5 units.
Typical periods offered: Spring

SCOT 5760 Foundations of Supply Chain Management
Examines how companies manage effectively the entire set of activities involved in the production and delivery of goods and services to their customers. Supply chain management (SCM) deals with the management of materials, information, and financial flows in networks consisting of suppliers, manufacturers, distributors, and customers. Recent trends in communication technology, sophisticated information systems, globalization of operations and markets, increased demand for mass customization, and increasing customer expectations have made the coordination and integration of these flows within and across companies critical to the success of businesses. This course focuses primarily on the foundations of SCM, touching topics such as: 1) matching supply with uncertain demand, 2) inventory management, 3) logistics, 4) design for variety, 5) global issues in SCM, 6) Quick/Accurate Response, 7) collaborative processes.
Credit 1.5 units.
Typical periods offered: Fall, Summer

SCOT 5770 Information Technology and Supply Chain Management
Recent developments and breakthroughs in information technology have radically changed the business world, offering opportunities not only for new products and services also for reengineering supply chains and improving supply chain performance. The course will study how the innovations in information technology affect the ways information flows through the supply chain, which in turns provide opportunities to better coordinate the material and financial flows. The course will review business cases in which companies use supply chain management concepts and emerging technologies to improve business processes as well as creating values.
Credit 1.5 units.
Typical periods offered: Fall

SCOT 5906 Operations and Supply Chain Management Industry Seminar

Fast-changing consumer demand, the Internet and digital technology, growing competitive pressures, and globalization create new opportunities and challenges on how firms can efficiently deliver the right product to the right place at the right time. Practitioners have responded to drastic market changes through various innovative strategies such as supply chain redesign. These challenges have also attracted significant academic attention and inspired new supply chain research. This course focuses on advanced topics in logistics and supply chain management that are of interest to managers, consultants, and researchers. Students will gain exposure to state-of-the-art knowledge about these topics by attending seminar sessions given by both industry and academic speakers. This course is for MBA, MSSCM or MSCA students.

Credit 1 unit.

Typical periods offered: Fall

SCOT 6500 Project Management

Change management has become synonymous with project management, since organizations that want to change their focus or direction increasingly recognize that introducing new products, processes, or programs in a timely and cost effective manner requires professional project management. This course analyzes complex projects and discusses available tools for managing them. Some of the topics covered include life cycle models, project selection, project monitoring and control, planning with uncertainty, project risk management, the critical chain method, and managing multiple projects. It also discusses commercial project management software and how to overcome its limited functionality to address the requirements of managing risky complex projects in practice. Students learn project management skills that will be useful throughout their careers. As such, this course is essential for current or future managers regardless of their career concentration.

Credit 3 units.

Typical periods offered: Spring

SCOT 7460 Global Supply Chain Management

Deals with the complexities, uncertainties and risks in global supply chains for goods and services. Building upon the foundational supply chain management principles in OMM 756, it develops the general management skills of planning and operating supply chains in the global arena – for example, dealing with expansion in new regional markets with demand, trade and other macroeconomic uncertainties, designing a global manufacturing and sourcing strategy, adapting the supply chain to macroeconomic and technological trends; optimizing multiple transport service types; coordination of vast out-sourcing and logistics networks for a multiplicity of production and service activities; designing organizational structures, information and communication systems that integrate the supply chain, and develop the supply chain risk management strategies and tactics for a resilient supply chain. Among the topics covered: global supply chain strategy, supply chain analytics, performance metrics, network design, supplier management, supply chain finance, integrated risk management of global operational risks, design for supply chain management, emerging technologies (blockchains, AI, Internet of things,3D printing, etc.) and their shaping of future supply chains, managing sustainable supply chains, and corporate social responsibility issues in global supply chains.

Credit 3 units.

Typical periods offered: Fall

SCOT 7480 Data-Driven Decision Making: Analysis to Action

This module introduces the fundamental building blocks of data-driven decision making. It first dives into two pillars of modern data science: causal inference and machine learning. It then discusses how to effectively build and run a data science team as well as make an organization data-driven. Last but not least, this module will also cover cutting-edge debates related to data science, such as privacy and fairness.

Credit 1.5 units.

Typical periods offered: Spring, Summer

SCOT 7500 Managing Operations

This course's first goal is to introduce the strategic and operational challenges that operations managers are confronted with, and provide frameworks to critically understand and deal with those challenges. For example, we will discuss the fundamental principles of quality management and lean systems, capacity strategy and real options, and supply chain management. The second goal of this course is to introduce process analysis and improvement tools. We will utilize basic analysis techniques to study process capacity and bottlenecks, evaluate the impact of process variability, and explore the fundamental principles of inventory management.

Credit 3 units.

Typical periods offered: Fall, Summer

SCOT 7540 Global Supply Chain Management

1. Developing an understanding of the state-of-the art general management and operations strategy thinking as it applies to firms with global manufacturing and service operations, and global supply chain logistics functions. 2. Developing a capacity for systematic analysis of global operations and supply chain problems on a functional, business and company wide. 3. Develop an understanding of the organizational and process structures used in global operations and logistics, and their strengths and weaknesses. 4. Develop an understanding of the key criteria utilized in multinational location sites and sourcing selection, global service facilities, configuration, and international supplier network develop 5. Gain an appreciation of the complexities associated with operations and supply chain reengineering at a global scale, and discuss approaches, including emerging technologies such as Internet and Radio Frequency Identification (RFID), in better handling such issues. 6. Understand state-of-the-art Global Supply Chain Practices (e.g., VMI, Quick Response, Virtual Integration, Mass Customization, Demand and Revenue Management).

Credit 3 units.

Typical periods offered: Summer

SCOT 8652 Theory and Research Methods in Inventory and Supply Chain Management

The course covers theories and techniques for inventory management. We introduce discrete and continuous time models with finite and infinite planning horizon and expose students to computational techniques for solving dynamic inventory models.

Credit 3 units.

Typical periods offered: Fall

SCOT 8653 Stochastic Models for Production and Service Systems

The first half of the course will focus on stochastic processes course with an emphasis on queueing (especially as applied to operations models) and probabilistic reasoning. The approach will be non-measure theoretic but otherwise rigorous. Students are assumed to already have a working knowledge of probability and stochastic processes. The course will contain a sampling of some of the most important stochastic proof techniques for operations. Specific topics include Markov chain analysis, queueing theory, sample path arguments, and limit theorems. The second half of the course will focus on the application of stochastic processes and equilibrium analysis to service operations systems. Classical models covered from the textbook

will be studied. Topics include observable queues, unobservable queues, and competition among servers. Students will also be exposed to recent research development by reading and presenting research papers on these topics.
Credit 3 units.
Typical periods offered: Spring

SCOT 8654 Inventory & Supply Chain Management Theory and Research
This course is designed for PhD students in the area of operations and supply chain management. From a theoretical perspective, this course covers the fundamental theory of inventory and supply chain management for deterministic systems and focuses on establishing structural results for optimal policies and deriving solution algorithms. The course content will include book chapters and (published/working) research articles. We will run in parallel to the course some "recent hot topic research areas" mini seminars. The hot topics might be outside of the traditional inventory and supply chain management domain, but they will still heavily rely on operational theory fundamentals and have immediate applicability to operations and supply chain management. This course is for doctoral students only.
Credit 3 units.
Typical periods offered: Spring

SCOT 8655 Dynamic Programming & Optimal Control
This doctoral-level course introduces discrete and continuous time models with finite and infinite planning horizon, and computational techniques for making sequential interrelated decisions under uncertainty.
Credit 3 units.
Typical periods offered: Fall

SCOT 8656 Optimization Theory and Applications
Optimization theory plays a fundamental role in modeling and guiding the behavior of rational consumers, firms, and regulators. This graduate course provides students a broad yet rigorous foundation in the theory and applications of optimization. It covers classical linear, nonlinear, discrete, and dynamic models; specialized methodologies of current applied research interest, including super modularity and robust optimization; applications of current research interest, including social and economic networks; and computer implementations using state-of-the-art software. See below for a detailed outline of topics covered. The course is designed for doctoral students in economics, finance, marketing, operations management, and related fields. Its objective is to help these students recognize elements of optimization models and structures in their diverse research topics, to utilize fundamental results from optimization theory to formalize, strengthen, and extend their research results, and to develop their mathematical maturity and ability to conduct rigorous proof-based research. To keep the coverage broad, only key results in each topic are presented along with their proofs. Geometric intuition is invoked whenever robust. Detailed references are provided for more specialized results. Research papers that demonstrate the applications of theory are discussed.
Credit 1.5 units.
Typical periods offered: Fall

SCOT 8657 Research Topics & Engineering Themes in Supply Chain & Revenue Mgt
This is a doctoral course on models in operations management (mostly in supply chain management) with an emphasis on economics-related topics. The first half of the course is devoted to studying methodologies for analyzing building-block models in supply chain management. The second half of the course focuses on the application of economics theories such as game theory to supply chain research. Upon completing this course, a student will have the necessary knowledge and tools to produce novel research in supply chain management.
Credit 3 units.
Typical periods offered: Fall