Technology Management MBA Program

Course Descriptions - Core Courses

**Autumn - Year 1 - Program Immersion**

# Building Effective Teams (2 credits)

This course introduces principles fundamental to building and maintaining effective work teams, including how to (1) establish strong, shared commitment to a compelling purpose, (2) bring about collective buy-in to concrete performance objectives, (3) promote adherence to a set of suitable work rules and roles, and (4) foster the interpersonal trust and respect crucial to mutual team member support and, ultimately, extraordinary team performance. The principles covered in this course are applicable whenever and wherever you must build a team to accomplish an objective.

# Negotiations (2 credits)

How to become an effective negotiator by learning proven techniques to build and maintain relationships, apply appropriate power and influence, structure agreements, and develop buy-in. Practices the methods employed by skilled negotiators such as developing a framework that leads to win-win solutions; how to resolve difficult situations using dispute settlement skill; powerful strategies for planning, negotiating, and implementing agreements.

# Ethical Leadership (3 credits)

This course is designed to meet one principal objective: to help students better manage the ethical aspects of business. In the course, each student will develop skills necessary to analyze and address ethical issues, to provide ethical leadership within and for the organization, and to conduct business responsibly.

**Winter - Year 1**

# Leadership Development (4 credits)

We use a comprehensive framework to facilitate your leadership development in this course. The framework, that we call the leadership development blueprint encompasses four progressive levels of leadership development: self, interactive, generative, and strategic, which we will cover over the duration of this course. What you will learn and practice in this course can be applied to your leadership development whether you are or are not currently in a formal leadership role.

# Financial Reporting and Analysis (4 credits)

Financial accounting information in technology companies from a management perspective. Topics include use of financial statements by managers, investors, financial analysts, and other firm stakeholders; measurement and reporting of assets, equities, income; analysis of financial ratios; and comparisons of financial performance across companies

# Statistical Analysis of Data (2 credits) *- Hybrid Format*

An introduction to statistical techniques useful for management decision-making, with analysis of problems using spreadsheet programs. Topics include visualization and summarization of data and variability; confidence intervals and hypothesis testing; and prediction using multiple regression and time series analysis.

**Spring - Year 1**

# Competitive Strategy (4 credits)

This course will focus on developing two types of capabilities: 1) the ability to think about a range of alternative solution pathways for a given problem (as opposed to assuming that the best or only possible solutions are the ones currently being offered) and 2) the ability to recognize when there are tradeoffs between alternative solution pathways, such that a firm must pick and commit to one as opposed to attempting to pursue many at once.

# Corporate Financial Strategy (4 credits)

Examines the theory of corporate finance and its application to firm's corporate financial decisions. Includes capital budgeting, capital structure, and financing decisions. Explores fundamentals of firm valuation and the link between managerial corporate financial decision and firm value.

# Microeconomics for Technology Managers (2 credits) *- Hybrid Format*

In this course students gain an understanding of how markets work, and lean optimal (profit-maximizing) strategies for managers. We will analyze how, under different types of market conditions, the manager can come up with the best answers to questions such as how much to produce, how much of each raw material to use, or how much to charge customers. Basic concepts of game theory and their applications to business strategy are also explored.

**Summer - Year 1**

# Domestic and International Economic Conditions (4 credits)

This course examines the macroeconomic environment in which firms operate. The ultimate objective is for you to understand how macroeconomic forces and policies affect the overall health of a nation’s economy and hence the business decisions that you make. The course will give you the tools to understand the key drivers of economic growth, inflation, unemployment, business cycles, fiscal policy, and monetary policy, both in the US and in other countries.

# Strategic Marketing Management (4 credits)

This course will introduce you to a marketing strategy framework and related concepts that are central to understanding and analyzing a marketing situation. This component will also sensitize you to the activities which marketers undertake in trying to achieve success for their products/services/corporations

# Decision Modeling (2 credits) *- Hybrid Format*

This course introduces you to the concepts and methods of management science, which applies mathematical modeling and analysis to management problems. Our principal interest is to help you develop the skills necessary to build and evaluate models and to understand the reasoning behind model-based analysis. Spreadsheet packages now have features that allow managers to perform sophisticated quantitative analysis in the comfortable and intuitive environment of the spreadsheet. This gives managers the power of quantitative analysis tools without forcing them to use unfamiliar mathematical notation.

**Autumn - Year 2**

# Leadership Immersion - Enhancing Leadership Effectiveness (2 credits)

During this 3-day immersive experience, students have an opportunity to explore, develop and enhance the critical leadership attributes, qualities, skills and competencies needed to create and sustain dynamic organizational success. This class challenges students to build on their established skills and competencies and to exchange ideas and experiences in a way that enhances leadership throughout their organization.

# Operations and Supply Chain Management (4 credits)

With the emergence of global competition and the rise of service economy, efficient purchasing, production and delivery of goods and services have become a vital part of the survival and success of every organization. This has become an increasingly critical managerial issue in the presence of the recent advancements in information technology, frequent introduction of new products, and quality conscious consumers when competing in the global markets. In this course, important concepts and analytical techniques essential for managing the operations of any organization, especially hi-tech companies, are discussed.

# Leading Organizational Change (4 credits)

One of the hardest challenges for organizations is managing change effectively. Rapid changes in technology and increased competition from globalization have combined to create a business environment that requires organizations to change rapidly and often.

**Winter - Year 2**

# Entrepreneurship (4 credits)

The course objectives are twofold: (1) to develop an awareness and understanding of the range, scope, and complexity of issues involved in startups; and (2) to gain insight into how entrepreneurs conceive, adapt, and execute strategies to create new enterprises. The course will be taught primarily through case discussions, supplemented with lectures and guest presenters. During the course, the participants will be placed in the role of an entrepreneur asked to address issues related to new venture creation.

# Entrepreneurial Finance (2 credits)

This course addresses the issues and challenges associated with one common source of financing for entrepreneurial enterprises: venture capital. We will analyze the terms and provisions of real venture capital term sheets, critically evaluate them, and examine how they can be used to address some key underlying problems such as adverse selection and moral hazard.

# Strategic Management of Technology and Innovation (2 credits)

The purpose of this course is to better understand the dynamics of industries driven by technological innovation and to provide a series of frameworks for managing technology- intensive businesses. The emphasis throughout the course is on the development and application of conceptual models which clarify the interactions between competition, patterns of technological and market change, and the structure and development of organizational capabilities.

# Global Strategy (2 credits) *- Hybrid Format*

This course is intended to help you develop a better understanding of the global environment in which businesses compete. In a global economy, managers need to develop a broad vision and an organization that can operate and compete effectively worldwide. This requires an appreciation of the various relationships that need to be managed including those with national governments and cross-border partners, as well as those between headquarters and international operations. This course will give you a broad overview of many of the issues that managers face including globalization trends, government-multinational firm relations, country risk, entry modes, cross-border collaborative challenges, and various strategies and organizational structures.

**Spring - Year 2**

# Managerial Accounting and Decision Making (4 credits)

Explores the critical internal ramifications of information in both decision making and performance evaluation. Through lectures and numerous case analyses, students become versed in cost concepts and cost behavior; overhead allocation (including activity-based costing); incremental analysis and decision making; and performance evaluation and incentive systems, including use of economic value added (EVA) and a balanced scorecard.

# Special Topics: Customer Experience Strategy (2 credits)

This course will teach entrepreneurs as well as established business strategists how to research and map customer experiences and use quantitative and qualitative analysis to develop specific customer experience improvement plans. The course objectives are threefold: (1) to develop an initial understanding of customer experience mapping, by learning how to map customers’ wants and needs and understand which customer experiences are the most important (and why); (2) to gain insight into how Customer Experience can be measured and used as a differentiator for company strategy execution; and (3) have hands-on practical experience in using CX methodology.

# Entrepreneurship Practicum (2 credits) *\*Capstone Course*

This course is about entrepreneurship and the role that verbal communication, influence, and persuasion play in shaping your success in starting, growing, managing, and leading a venture. This course emphasizes the power of what you say and how effectively you say it in the entrepreneurial context. We will delve into what goes into an effective pitch, what the different parties around your business may be looking for, and how to influence key stakeholders in your own success as entrepreneur. With an experiential learning approach, class sessions will feature speakers and panels from across the startup ecosystem: compelling entrepreneurs, active investors, media executives and practitioners who support our thriving innovation economy. The course will culminate in an “EXPO Night” as the last class session, where each team will pitch to a large group of investors/CEO’s/executives.

**Electives**

# Business Analytics: Tools for Big Data (2 credits)

Learn how to use business analytics to gain insights and make better decisions. This course covers quantitative tools and software like Tableau and R, applicable across various business functions (operations, marketing, accounting, finance). You'll develop the skills to manage and collaborate with analytics professionals, focusing on real-world applications to create value.

# Product Management (2 credits)

Learn the essentials of product management, focusing on technology and software industries. This course teaches entrepreneurs and business strategists how to drive innovation, identify growth opportunities, and create profitable products. Through best practices, lectures, and hands-on activities, you'll learn to ideate, design, develop, and launch products that customers love. The course includes small group work and workshops, culminating in a comprehensive product roadmap covering market fit, MVP design, GTM strategy, and scaling plans.

# Strategic Management Practicum (2 or 4 credits)

Students apply skills learned in the MBA classroom to real world challenges and opportunities facing contemporary enterprises. Under faculty oversight, students partner with host firms on applied learning, consulting-style projects that offer additional development opportunities not available in traditional classrooms.