

## **ASIA SCHOOL OF BUSINESS MBA CURRICULUM**

### **APPLIED BUSINESS RESEARCH**

#### *Case Study Analysis*

We will apply the latest methodological tools to discuss evidence-based management. Cases will be presented that illustrate how companies use various methodological techniques and how such usage might be further improved. Students will be challenged to demonstrate mastery of both data collection and interpretation in answering some of the most profound questions facing the business world today.

### **ENTREPRENEURSHIP & INNOVATION**

#### a) *Making “Makers”*

This course introduces student to the process of making products which includes design and fabrication of mechanical, electrical and software components. Student will learn 3D CAD, Arduino controller platform and App development and create working prototypes of their product ideas. Course has weekly individual projects and a final team project. Concludes with Demo day, a public exhibit of all projects. No prior technical experience required.

#### b) *Design Thinking for Entrepreneurs*

Identifying an unmet need with social relevance is the key to creating a successful venture. This course introduces Design Thinking principles to identify such problems and create solution strategy. The student does field study and selects a problem to work on during the course as the final project. Student creates multiple prototypes of product solutions and validates them in the field.

## **ORGANIZATIONAL PERFORMANCE**

### *a) Organizational Processes*

Organizational Processes enhances a student's ability to take effective action in complex organizational settings by providing the analytic tools needed to analyze, manage, and lead the organizations of the future. Emphasis is placed on the importance of the organizational context in influencing which individual styles and skills are effective. The subject centers on three complementary perspectives, or "lenses", of an organization: political, cultural, and strategic design.

### *b) Organizational Behavior*

Through lectures, discussions, and class exercises, this course analyzes the human processes underlying organizational behavior and change. The class creates awareness of the challenges of organizational change and equips a student to better handle it. There are many psychological and sociological phenomena that regularly occur in organizations, though many of these forces are difficult to see. The aim is to increase understanding of these forces – in themselves and in others – so they become more visible and manageable.

## **SOUTHEAST ASIA IN ACTION (ACTION LEARNING I)**

### *Team Project*

First of the series, this course provides opportunity to students to apply concepts, learned in the classroom, to solve real-life business problems. Faculty supervision, support from mentors, and regular reflection/ review ensure that students acquire problem-solving skills (undertaking pre-engagement research, structuring the problem, identifying root causes, deciding on the appropriate tools to be used, weighing options, and making a recommendation to the owners of the enterprises) as also ability to work effectively in teams.

Target partners will be high-growth SMEs, social enterprises, and start-up enterprises. The engagement will run throughout the semester and students will spend four-weeks immersed with partner entities.

## **FINANCE**

### *a) Finance Theory*

Covers financial theory and empirical evidence for making investment decisions. Topics include portfolio theory; equilibrium models of security prices, including the capital asset pricing model and the arbitrage pricing theory; empirical behavior of security prices; market efficiency; performance evaluation; and behavioral finance.

### *b) Financial Management*

Introduces the fundamentals of modern financial analysis and applications to business challenges in capital budgeting, project evaluation, corporate investment and financing decisions, and basic security analysis and investment management. Topics include an introduction to the financial system, the unifying principles of modern finance, and fundamental present-value relations; valuation models for both stocks and bonds and capital budgeting; methods for incorporating uncertainty into valuation models; valuation of derivative securities; and applications to corporate financial decisions.

### *c) Accounting*

Provides an introduction to the concepts and standards underlying accounting systems as well as the preparation and interpretation of financial information. Emphasizes the relation between accounting data and the underlying economic events generating them. Develops students' understanding of the nature, scope, and limitations of accounting information.

## **ECONOMICS & STATISTICS**

### *a) Economic Analysis for Business*

This course offers an introduction to principles of microeconomic analysis as a framework for making more informed managerial decisions. Primarily focuses on the analysis of competitive markets with supply and demand, sources of market power, price discrimination and externalities. Also covers the basics of game theory and its application to competitive strategy and auctions. Students use the tools presented to analyze business and public policy decisions that arise in range of industries.

### *b) Introduction to Statistical Methods*

Introduces students to basic concepts in probability and statistics of relevance to managerial decision making. Topics include basic data analysis, random variables and probability distributions, sampling distributions, interval estimation, hypothesis testing, as well as the use of regression analysis for solving business problems. Focuses on implementing an empirical toolkit that provides credible answers for business planning, with applications to economics, finance, marketing and project management.

### *c) International Trade*

Aims to give students an understanding of the international macroeconomic environment in which firms operate and what this means for business leaders. Analyzes the causes, effects and policy responses that affect in global economic issues. Focuses on current economic debates and challenges facing countries around the world.

## **DATA MODELLING DECISION**

### *a) DMD I*

Introduction to business data modeling. We shall pursue an in-depth study of constrained optimization, starting from linear programming and proceeding to discrete, nonlinear, stochastic, and robust optimization. We will also explore basic queueing theory. We shall then examine how such techniques are used in real-world business problems such as scheduling and inventory models.

### *b) DMD II*

We shall begin by reviewing basic predictive analytics and machine learning techniques, with business applications. Forecasting techniques will be used to predict trends, moment matching will be used to predict distributions, and classifiers will be used to predict categories. Feature selection, extraction, and dimensionality reduction techniques will be demonstrated. We will then discuss causality, including treatment effects and exogeneity. Experimental and quasi-experimental techniques, including A/B testing, DoE, natural experiments, instrumental variables, difference in difference, and regression discontinuity will be demonstrated. If time permits, an introduction to structural econometrics will also be included.

### *c) Systems Dynamics*

We will first examine the goals of Systems Dynamics and an overview of some existing models. We will then discuss causal loop diagrams, stock/flow diagrams, and their underlying equations. We will then discuss how to estimate the parameters for those equations as well as how to test the veracity of a model. Students will then build their own models in conjunction with an Action Learning project.

## **USA Trek**

After the 4 weeks of course work at MIT Sloan, ASB students will embark on a 2 weeks US Trek that will offer an opportunity for further study and in-depth exploration of companies in the industries students are pursuing. They are directed learning experiences for credit under the guidance of faculty. Treks focus on areas with a high density of relevant businesses.

## **MIT SLOAN**

During the 4-week stay at MIT, students will take courses offered by MIT Sloan faculty and engage in Sloan student activities.

## **STRATEGIC MANAGEMENT**

### *a) Competitive Strategy I*

This course focuses on some of the important current issues in strategic management. It will concentrate on modern analytical approaches and on enduring successful strategic practices. It is consciously designed with a technological and global outlook since this orientation in many ways highlights the significant emerging trends in strategic management. The course is intended to provide the students with a pragmatic approach that will guide the formulation and implementation of corporate, business, and functional strategies.

### *b) Competitive Strategy II*

This course is intended to be an extension of course Strategic Management I, with the purpose of allowing the students to experience an in-depth application of the concepts and frameworks of strategic management. Throughout the course, we will discuss the appropriate methodologies, concepts, and tools pertinent to strategic analyses and will illustrate their use by discussing many applications in real-life settings.

### *c) Human Resources*

This course is about both the design and execution of human resource management strategies. This course has two central themes: (1) How to think systematically and strategically about aspects of managing the organization's human assets, and (2) What really needs to be done to implement these policies and to achieve competitive advantage. It adopts the perspective of a general manager and addresses human resource topics (including reward systems, performance management, high-performance human resource systems, training and development, recruitment, retention, equal employment opportunity laws, work-force diversity, and union-management relationships) from a strategic perspective.

## **ACTION LEARNING II**

### *Individual Project*

Second of the series, this course provides opportunity to students to excite a partner company with his/ her capabilities. Students will work individually with an enterprise, addressing a pre-identified business problem. Guidance and supervision by Faculty, external mentors, and internal mentors help the student in sharpening problem-solving skills (secondary research, understand functional areas, create innovative solutions, and influence stake holders) as also ability to be effective in a new environment. Target partners will be large companies or MNCs operating in the ASEAN region. The engagement will run throughout the semester and each student will spend eight-weeks immersed with the partner entity.

## **OPERATIONS & LOGISTICS**

### *a) Operations Management*

This course provides students with concepts, techniques and tools to design, analyze, and improve core operational capabilities, and apply them to a broad range of application domains and industries. It emphasizes the effect of uncertainty in decision-making, as well as the interplay between high-level financial objectives and operational capabilities. Topics covered include production control, quality management, process design, and inventory management. Also included are case studies, guest lectures, and simulation games, which demonstrate central concepts. Attention will be dedicated to Asian centric case studies.

### *b) Operations Strategy*

The course covers strategic decisions in technology, facilities, vertical integration, human resources, and other areas, and also explores means of competition such as cost, quality, and innovativeness. This course provides a unifying framework for analyzing strategic issues in manufacturing and service operations. Students analyze the relationships between manufacturing and service companies and their suppliers, customers, and competitors.

We will address operations strategy by building on the following concepts:

1. Reengineering and process design developed by Dr. Michael Hammer.
2. Manufacturing strategy as developed in the literature, primarily by people at HBS.
3. Supply chain design and 3-D concurrent engineering literature as developed in Charles Fine's book, *Clockspeed: Winning Industry Control in the Age of Temporary Advantage*. Perseus Books, 1999.

### *c) Logistics & Transportation*

This subject presents a range of advanced topics in integrated logistics, transportation and supply chain management. We will survey operations research models and techniques developed for a variety of problems arising in logistical planning of multi-echelon systems. Topics include vehicle routing problems, dynamic lot sizing inventory models, stochastic and deterministic multi-echelon inventory systems, the bullwhip effect, pricing models, and integration problems arising in supply chain management.

## **ACTION LEARNING III**

### *Team Project*

Third of the series, this course provides opportunity to students to showcase their ability to add value to an enterprise as a trusted advisor. Addressing a pre-identified business problem, the students learn to work across geographies, understand the dynamics of a multi-cultural environment, and provide replicable solutions that affect the P&L of the enterprise. Guidance and supervision by Faculty, external mentors, and internal mentors support the student teams in this process. Target partners will be MNCs. The engagement will run throughout the semester and each student will spend eight to ten weeks immersed with the partner entity.

## **Communication**

### *a) Communication for Leaders*

Develops and polishes communication skills, strategies and methods through discussion, examples, and practice. Emphasizes writing and speaking skills necessary for effective leaders. Includes several oral and written assignments, which are integrated with other subjects, and with career development activities, when possible. Special focus is put on the communication with Data; how to communicate data clearly and effectively in a variety of situations. Develops skills to deliver data-oriented communications in both oral and written formats. Students participate in self-assessments and peer feedback. Final project involves a team presentation on a complex topic.

### *b) Cross-cultural Communication*

Provide a better understanding of one's own cultural values and unstated cultural assumptions which, at times, may and can cause conflict in communication with members from another cultural and/or national group(s). Creates the understanding of different conceptualizations of culture, and some of the consequences of cross-cultural communication and interactions. Discuss a framework, which compares and contrasts cultures in terms of values, thought patterns, and styles of communication. The approach will be historical, and also necessarily interdisciplinary with particular attention paid to cross-cultural communication at the interpersonal, intranational, and international levels.

## **Marketing**

### *a) Marketing Management*

Develops skills in strategic marketing analysis and planning, and introduces key marketing ideas and phenomena, such as how to deliver benefits to customers. Presents a framework for marketing analysis and enhances problem solving and decision-making abilities in areas, like target market selection, competitive positioning, and the formulation of product, pricing, communication and distribution strategies. Material relevant to understanding, managing, and integrating marketing concepts in managerial situations, from entrepreneurial ventures to large multinational firms and to consulting.

### *b) Marketing Research*

Introduces and practices methods of inquiries into markets and consumer decision making and behaviors. Enables to translate a marketing problem into feasible research questions. Develop judgment on the strengths and weaknesses of alternative research designs. Become aware of the many sources of marketing information and the various means for gathering such information. Become more sensitive to the biases and limitations of marketing data and basic data analysis; and give an understanding of data analysis techniques; and practices the design and execution of a marketing research project.

TOTAL CREDITS TO GRADUATE: 47 credits

- Orientation and project matching
- Action Learning prep-course and client interaction
- E&I Lab
- MIT faculty 5-day long courses
- Weekly tool kit building and revisions of frameworks
- ASB faculty courses
- 4 weeks on site in teams of 4
- Reflection post project and Presentation