

## **Descriptions of courses**

### **ITM 501 Introduction to Innovation Management : Theory and Practices**

This course intends to provide a multi-methodological approach to multi-faceted issues concerning Innovation Management. In short, we will examine the chain of value creation in the market through commercialization of new technology and also the success factors of those activities. We will study this topic both in theory and practices.

### **ITM 502 Entrepreneurship**

This course aims to prepare students to develop the knowledge, skills, and mind-set that will support and enhance their entrepreneurial activities in a startup or a corporate setting, by exposing them to a diverse group of entrepreneurs, their real life stories, and their genuine motivation.

### **ITM 503 Managerial Economics**

This course is concerned with the understanding of basic principles in business economics. Business economics considers how individuals, firms, the government, and other organizations make choices. In addition, economic forces are a fundamental determinant of firms' profitability and growth, and economic thinking should be a fundamental influence in nearly every managerial decision. In this course, we will examine the principles of microeconomics, and illustrate how they apply to managerial decision-making. By the end of semester, students should understand the main logical arguments in business economics and be able to use these tools to analyze business and public policy problems.

### **ITM 504 Financial and Managerial Accounting**

This course is to provide the basic knowledge of the financial accounting and the managerial accounting, essential to understanding the business performance, and to making proper business decision to maximize the financial return. The subjects include, but not limited to, understanding financial statements, project valuation, cost behaviors, and budgeting. As a basic mandatory course for ITM, this course is designed to offer comprehensive understanding of accounting subjects.

### **ITM 505 Marketing Management**

This course examines the process of strategic marketing management and considers its role within organizations. It presents the fundamentals of the marketing concept and considers the relationship between the marketing concept and other concepts such as innovation and entrepreneurship. The course considers tools and methods used to examine marketing environments, understand consumer and organizational buying behavior, segment markets and position products, develop new products, manage existing products and promote, price and place products. Numerous case study assignments will also be a part of the course.

### **ITM511 Statistical Analysis**

This course covers the concepts and techniques concerning exploratory data analysis, frequency distributions, central tendency and variation, probability, sampling, inference, regression, and correlation. Students will be exposed to these topics and how each applies to and can be used in the business environment. Students will master problem solving using both manual computations and statistical software. At the end of the class, students will be able to analyze relevant data using contemporary computer-based technology and apply the results to make decisions concerning the specific question or problem.

### **ITM520 Information & Communication Technology Foresight**

The pace of the technology progress in the information and communications industry will continue to increase. This is a very large, dynamic industry with many different types of players involved in the industry, driving innovations in many directions. In this class, the students will gain technology and business foresight from the perspectives of service providers, enterprises, end-users, and vendors.

### **ITM525 Bio-Medical Technology Foresight**

This Bio-Medical Technology Course provides in-depth review of the broad range of up-to-date bio-medical technologies. Based on deeper understanding on such technologies, students can get insights on how to continue to foster innovation and to ensure safety and effectiveness of future bio-medical technologies in order to bring improved outcomes from the utilization of those technologies.

#### ITM530 Energy, Environment, Water and Sustainability Technology Foresight

This course focuses on the technological and cost “fundamentals” of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. We consequently investigate the technological promise and progress of each technology, as well as its economic opportunities and challenges. At the conclusion of the course, students will have a solid technical and economic understanding of these energy technologies.

#### ITM540 Strategy for innovative Business

This class introduces the students to the core concepts of strategic management for technology-intensive industries. The topics covered in the class include: external and internal analysis, value chain, different levels of strategies, acquisitions, outsourcing, organic growth strategy through innovation, platform strategy, and pricing strategy. There will be both group projects and individual assignments. By doing projects and assignments, the students will be able to internalize the understanding of the strategic frameworks by applying to key technology-intensive industries of the future. The instructors will challenge the students to participate in the class discussions and to share ideas through case studies and group discussion exercises.

#### ITM550 Finance for Technology Executive

This course studies financial subjects that are essential to manage the technology organization. The subject covers valuation of assets, risk management, risk return tradeoff, corporate financing, derivatives, and venture capital. This course provides comprehensive understanding of modern financial system as well.

#### ITM560 Leadership for Innovative Organization

Ultimately, the goal of managers and leaders is to get things done in organizations. Most of that work is accomplished by effectively managing human and social capital. Using cases, exercises, and readings, we will focus on the skills and tools managers need to be successful in today’s rapidly changing, dynamic, and innovative organizations.

#### ITM561 Negotiation and Communication

Negotiation and Communication is a hands-on, skill-oriented class which addresses two topics of central importance to anyone who seeks to succeed or to survive, in an organizational environment. The concepts presented in the course are introduced to prepare for or reflect on the succession of exercises or simulations.

#### ITM570 Process and Operations Management

This course studies the essential concept and cases to manage the business process and operation efficiently and effectively. Broad issues of scheduling and planning, supply chain management, and project management are all considered in a concise integrated manner.

#### ITM580 Survey of Intellectual Property and Business Law

This course covers the broad range of IP topics and selected business law issues. Students will gain a basic understanding on the principal modes of legal protection for intellectual work under patent, copyright, trademark, and trade secret. Students will also learn about legal issues on business formation and management, securities regulation, and shareholders’ rights and liabilities. Furthermore, students will be familiarized with contractual agreements, theories and types of product liability, and employment issues. This course is intended to help students become a smart user of legal services in general. It is also intended to be particularly helpful to students who want to be a IP manager in an organization.

#### ITM610 Formation and Implementation of Entrepreneurial Ventures

This course centers on writing a comprehensive business plan and implementation plan for a venture of students’ choice. Teams of 3 ~ 4 students will work on the development of a business plan. It will allow students to acquire the knowledge and skill set necessary for developing and writing a coherent and effective plan to start a business, in either a startup or a corporate setting.

#### ITM611 Corporate Entrepreneurship and Innovation

This course will expose students to a mix of approaches and techniques that promote innovative thinking and entrepreneurial behavior in organizations. The first half of the course examines how patterns of change in technologies and industries create both opportunities and threats for existing firms and entrepreneurs. The second half of the course focuses on tactics and strategies that encourage innovation and entrepreneurship within (and between) organizations.

#### ITM620 Best practice of Technology commercialization

This course is designed to provide students with theoretical and practical knowledge of technology commercialization within companies, universities, spin-offs, and standalone start-ups through a case-based approach, guest speaker's experiences, and a term-length project, will enhance their understanding of various business approaches and experiences related, so they have an opportunity to adopt the perspective of a CEO/founder or decision maker.

#### ITM630 Innovation system and Technology policy

This course examines the relationship between innovation and competitiveness at the firm(esp. MNC) and country levels and evaluates how innovation policies regarding R&D, human resource development, technology financing, innovation cluster, and high-tech SMEs etc., are being gradually reshaped in the current context of the globalization of a knowledge-driven economy.

#### ITM631 Case Studies of Open Innovation

This course intends to investigate the real life cases of open innovation, which has emerged as new innovation paradigm at global scale. We will follow the reason why open innovation occurred in some firms but not in others. Specifically, we will approach this issue in light of innovation habitat.

#### ITM640 Integrated Perspective of New Product Development

The development of new products (goods or services) is an intensively cross-functional process. This course examines that process from the classical marketing perspective with operations, finance, organizational policy, and strategic planning.

#### ITM650 Integrated perspective of Merger and Acquisition

Corporate merge and acquisition involves various issues intertwined with each other; strategic, financial, organizational, and legal issues. This course provides integrated perspective on corporate merge and acquisition using these four different subject view points, and discusses the tradeoff and the common traps using empirical cases.

#### ITM960 MS Thesis Research

This is research credit for preparing Master's dissertation.

#### ITM965 Individual /Group study in Master's

This is research credit for independent study

#### ITM980 Ph.D Dissertation Research

This course is for the doctor's degree thesis based on independent research work performed by he candidate in the laboratory of the advisory professor

#### ITM985 Individual/Group Study in Ph. D

This is research credit for independent study

#### ITM991 Internship Program I

An internship work experience is intended to help you apply your formal classroom education to "real world" work experience. The work assignment must be related to the your area of interest and may be conducted within business or industry, the public or private sector.

#### ITM993 Internship Program II

An internship work experience is intended to help you apply your formal classroom education to "real world" work experience. The work assignment must be related to the your area of interest and may be conducted within business or industry, the public or private sector.

#### ITM995 International Internship

An global internship work experience is intended to help you apply your formal classroom education to "real world and global" work experience. The work assignment must be related to the your area of interest and may be conducted within business or industry outside of Korea.