

# Descriptions of Courses

## □ Techno-MBA Program

### MGT503 Management Statistical Analysis

This course provides first-year graduate students with necessary background of statistics. Topics include the basic concept of probability, distributions, sampling, estimation, hypothesis, regression analysis, and experimental design.

### MGT504 Quantitative Analysis for Management I

This course enables MBA students to understand quantitative analysis methods for management. The quantitative techniques that are covered include optimization and decision tree analysis under uncertainty. These techniques are applied to business cases with excel.

### MGT507 Energy Economics and the Environment

This economics course examines energy issues that pertain to the environment. The objective is to apply economics to particular issues of energy markets, environmental impacts, investment in renewables, and other energy issues such as transportation and conservation.

### MGT508 Energy Policy and Environment

Energy policy is gaining increasing recognition as a critical component of state and national public policy, especially environmental policy. This course explores the connections between energy and environment policy and politics including the connections with Climate Change.

### MGT509 Energy and Environmental Technology

The purpose of this course is for students in carbon finance MBA program to understand energy and environmental technologies for climate change and explore business opportunities.

### MGT510 Leadership in Organizations

This course is about the new science of leadership. It presumes that we are all deficient in some way in terms of our cognitive ability, resources, or talents and that the way to acquire leadership power is not through the personal development of those skills but by being able to access the skills you need through experts who possess those skills. The goal of this course is to provide you with the coherent set of techniques needed to lead in environments characterized by complexity, interaction, and interconnectedness.

### MGT511 Strategic Management

This course introduces concepts, theories, approaches and analytical models associated with the process of strategy formation and implementation in both profit and non-profit organizations. It also provides opportunities to make strategic analyses and to make decisions for strategic issues of real organizations through participation in class discussions and performing group term projects.

### MGT512 Research Methods

The purpose of this course is to provide MBA students with the basic concepts, research approaches and analysis techniques; students will need to write a masters thesis and to understand research papers. The course is composed of the following sections: (1) Theory Building & Research Design, (2) Data Collection & Measurement, and (3) Case Study & Statistical Analysis.

### MGT514 Principles of Managerial Economics

This course focuses on the issues involving the rapidly changing international economic & political environments and their impacts on the decision making processes of businesses. Mutual relationships and

dependence among advanced and developing economies make firms change their organizations and strategies. Students will review recent articles and relevant references.

#### MGT515 Economics of Strategy

This course provides an economic foundation for competitive advantage, competition, market analysis and business model development. Topics include a concise economics review followed by the study of horizontal and vertical boundaries of the firm, transaction costs of market exchange, industry and market analysis, diversification, strategic commitment, pricing rivalry, entry and exit, strategic positioning for and sustaining of competitive advantage. This course also discusses these topics from the digital economics point of view. This course tries to help students to gain an analytic base, generalize and form robust insights into business strategy by focusing on various case studies and thesis research in such areas as core competence, competitive analysis and business model development. A minimum level of mathematics, such as the first order derivatives of functions, is required.

#### MGT516 International Business

This course surveys some key issues in international business and seeks to enable students to develop a conceptual framework in management of the firm in international settings. In particular, this course focuses on both the forces of globalization and their impact upon the modern firm and its appropriate organizational and strategic responses to global challenges.

#### MGT517 Negotiation and Conflict Resolution

This course reviews the strategies and tactics of distributive and integrative bargaining approaches in the theory and practice of business and international negotiation. Students also practice, through various simulations and case studies, skills to achieve the best available objectives in various business and international negotiation settings.

#### MGT518 Global Competition Strategy

The GCS course explores the determinants of competitiveness and successful economic development viewed from a bottom-up, microeconomic perspective. While sound macroeconomic policies, stable legal and political institutions, and improving social conditions create the potential for competitiveness, wealth is actually created by firms at the microeconomic level. The course focuses on sophistication and productivity of firms, the vitality of clusters, and the ultimate determinants of a nation's or region's productivity. The course has been designed not only for students at Harvard but as a platform that can be taught at universities throughout the world.

#### MGT519 New Governance and Public Management

This course studies management theories and practices of new governance and management in the public sector. The course addresses the various issues of new public management: government reinvention, privatization, contracting, intersectoral collaboration, total quality management, public entrepreneurship, strategic planning, human resource management, organizational design, change management, and performance measurement.

#### MGT520 Marketing

This course takes an analytical approach to the study of marketing problems of firms. Attention is given to the influence of the marketplace and the marketing environment on marketing decision making; the determination of the organization's products, prices, channels, and communication strategies; and organization's system for planning and controlling its marketing effort.

#### MGT521 Marketing Research

This course covers main concepts and techniques useful for identification, collection, and analysis of

information necessary for marketing decision making. Emphasis will be given to the research design for data collection and computer practice for processing and analysis of collected data. Topics include problem definition, experimental design, sampling, questionnaire design, and various multivariate data analysis techniques.

#### MGT522 High-Tech Strategy

This course provides a series of frameworks for managing high-technology businesses. The emphasis throughout is on the development and application of conceptual models which clarify patterns of technological and market change and the structure and development of internal firm capabilities. This is not a course in how to manage product or process development. The main focus is on the acquisition of a set of analytical tools which are critical for the development of a technology strategy. These tools can provide the framework for insightful planning when deciding which technologies to invest in, how to structure those investments and how to anticipate and respond to the behavior of competitors, suppliers, and customers. The course should be of particular interest to those interested in managing a business for which technology is likely to play a major role, and to those interested in consulting, venture capital, analysis of high tech stocks, or fund management.

#### MGT524 Design Management

This course is designed to teach graduate students how to manage various types of design organizations and large scaled design projects within an agreed upon time budget

#### MGT526 Brand Management

This class is designed to deliver what brand equity is and how it is developed and applied in strategic marketing activities. Three substantial areas are: (1) the nature of brand equity, (2) the process by which brand marketing is undertaken, (3) the strategic management of brand equity.

#### MGT527 Sustainable Society and Business Innovation

This course examines the business innovations of marketing, supply chain management, innovation, and human resources management for sustainable consumption and production. Background theory and cases will be covered.

#### MGT528 Carbon Market & Corporate Strategy

The objective of this course is to examine the implications of climate change and related policy and market issues upon businesses, followed by discussion on theory and cases of carbon markets, international climate change negotiations and related firms' strategy issues and new business opportunities.

#### MGT530 Supply Chain Management

This course enables MBA students to understand strategic supply chain management (SCM). Theories and methods in SCM (such as the design and operations of value creation processes and strategic issues related with inventory, capacity, and quality) will be covered and real-world business cases will also be discussed.

#### MGT531 Global Supply Chain Management

The primary objective of this course is to teach the students the key issues in Global Operations Management (GOM). Although the global nature of business management has been recognized for quite a long time, this course, Global Operations Management, is a fairly new development in the field. We start with examining research frameworks that help us to obtain conceptual and analytical tools so that we can formalize the ensuing inquiry into various subjects in GOM. After this theoretical introduction, we take on more empirical aspects of the subject, supplemented by case studies. During this course, the students are expected to develop the expertise to identify critical issues in actual business situations in an international context, as well as the ability to fully comprehend theoretical postulates offered by researchers in business

administration and economics. The instructor also expects the students to be able to express their analyses unambiguously and confidently in class.

#### MGT532 Strategic Management of Technology

This course covers current issues and theories on technology strategy, management of technology, and venture management. The major issues covered include principles of technology management, designing and implementing technology strategy, strategic management of innovation, and new product development. Some emerging issues will also be discussed.

#### MGT533 R&D Management

This course covers theories and practices on the management of R&D activities, primarily from the micro perspective. The major issues covered include principles of R&D management, and approaches and techniques on the management of R&D information, projects, professionals, organization and resources. R&D strategy will also be discussed.

#### MGT534 Entrepreneurship and New Venture Creation

This course examines theories and practices on entrepreneurship and venture management and introduces how to start new ventures. Key components of entrepreneurial management, success / failure factors for new ventures, practical start-up processes are covered through analysis of research papers and case studies. Students as a team are required to prepare a business plan. Some special issues are also discussed.

#### MGT535 New Technologies and High-Tech Industries

This course is designed to introduce recent trends in emerging high technologies and to discuss strategic and managerial issues and cases in these high-tech industries. Students will have an opportunity to learn new perspectives on strategies as well as technological knowledge and implications in emerging high-tech industries. Especially, information and communications technologies, internet-related industries, computer and display sectors, and life science industries will be covered. Several industrial experts will be invited to deliver seminars.

#### MGT536 Environmental Management

This course deals with the linkage of strategic management and environmental management system. Topics included are development and implementation of corporate environment strategy, reactive and proactive environment management issues, environmental technology, and new business opportunities. We also discuss the issues of environmental management and business profitability, green marketing, and ISO 14000.

#### MGT537 Public Policy Analysis

This course is designed for students to understand theories and practices of public policy and to conduct analysis in a political and administrative environment. The course addresses the issues of public economics and policy process, which include topics such as public goods, externalities, public choice, regulation, social security, decentralization, policy making and implementation procedures, and practical analysis tools.

#### MGT538 China's Economic Development

China's rapid economic and technological development have given Korea both opportunities and challenges. This course handles technological, economic, historical, cultural and socio-political issues with China's rapid development and what Korea should do to cope.

#### MGT539 Social Entrepreneurship and Nonprofit Management

This course is about the opportunity and challenges of using your managerial skills and entrepreneurial talents creatively and appropriately to help solve social problems through the provision of socially important goods and services. The course studies the basic theories and methods in strategy and management of

nonprofit organizations and social enterprises. The course deals with the various issues of nonprofit management: social entrepreneurship, strategic management, marketing, fund raising, strategic collaboration, service management, total quality management, human resource and volunteer management, and change management.

This course has three primary educational objectives: To examine the distinctive challenges and rewards of entrepreneurship and management in creating and developing social purpose organizations; To build the knowledge, skills, and attitudes necessary for responding creatively and successfully to the challenges; To provide an appreciation of the relative strengths and weaknesses of different organizational forms in providing social goods and services

#### MGT540 Business in Society

This course will study frameworks and concepts of responsible and sustainable management. The approaches to be taken are multi-stakeholder approaches - integrating ethics issues, transparency, governance, social responsibility, environmental responsibility and economic responsibility of firms. This is an emerging paradigm of business management - as a comprehensive corporate risk management framework and also as a sustainable value creation framework. Sustainability reporting (SR), ranking and evaluation models and socially responsible investment (SRI) will also be discussed.

#### MGT541 Electronic Commerce and eBusiness

Electronic Commerce (EC) and eBusiness were born with the propagation of the Internet. EC and eBusiness have drastically changed the way of retailing, manufacturer's direct marketing, banking and services. EC deals with the corporate relations with external customers, suppliers and other partners, while eBusiness deals with the eTransformation of internal part of business including manufacturing and procurement process. This course studies the key trends, principle technologies for EC and eBusiness, and business strategies by reading texts, practicing sites, and discussing cases. Role playing is exercised under real world case scenarios.

#### MGT542 Management Information Systems

The purpose of this course is to present the relationships among the key components of MIS. This course reviews fundamentals on hardware, software, I/O devices, file and data management, system analysis and design, project management, decision support systems, expert systems, and telecommunications. This course does not intend to merely review the basics of computers, but to emphasize more advanced topics like hardware selection, software development strategy, MIS organization and research methodology. All faculty members who are experts in each issue will teach the relevant topics.

#### MGT544 Database Management

This course mainly deals with online transaction processing. The focus is on how a database engine manage concurrent multiple-user data accesses is exploited in terms of data consistency, transaction serializability, transaction atomicity and update durability. Commercial database engines are introduced. Distributed paradigms for transaction management such as global agreement protocols are also dealt with. Cases of distributed processing are introduced.

#### MGT548 Enterprise Data Management

Whilst data in enterprises increases enormously as the scope of business expands, it is not easy to find a novel methodology for enterprise-wide data infrastructure development. Idea of enterprise-wide development strategy would be experimented in detail during the last half of the course.

#### MGT550 eBusiness Technology

This course deals with an overview of the technologies relevant to electronic business. Aspects covered are

communications and networking, the Internet and mobile eBusiness, architecture of web systems, data interchange, access and cryptographic security, electronic payments, databases, multimedia, mass personalization and recommendation systems, search engines, data mining and intelligent agents.

#### MGT552 Information Ethics and Security

A complete information security system consists of -- in the order from bottom to top -- network security, operating system security and database security. Data cryptologies, digital signatures, digital certifications are also dealt with.

#### MGT555 Business Model & Process Innovation

This course covers methodologies and theories for business model and process innovation that is required to strengthen organization's strategic advantages. We discuss the importance of business model innovation in today's business environment through many case discussions. Then, we cover methodologies in selecting, analyzing, and re-designing "core" business processes key to firm's strategic goals. BPM solutions and BPM consulting practices will be introduced through guest lectures, and hands-on projects for real-world problems.

Through the semester, students will sharpen their essential skill sets for effective business leaders. They include: Effective Communication(oral and written communication); Analytical Thinking from Case Studies; Creative Thinking for Innovations

#### MGT560 Financial Accounting

This course covers basic concepts of accounting and its role in the capital market. The topics include accounting process, meanings and interpretation of financial statements, understanding of financial statement items, basics of financial statement analysis, and investment and loan decision using accounting information.

#### MGT561 Corporate Financial Policy

This course is designed to provide a conceptual framework for understanding the field of corporate finance. The issues addressed in this course include time value of money, relation between risk and return, capital budgeting, capital structure, dividend policy and corporate governance. This course will emphasize the logical structure of various theories and empirical evidence on them.

#### MGT562 Case Studies in Finance

The principal objective of this course is to study cases in Finance so that students develop practical skills to solve real business problems by applying Finance theories and tools. This course will provide students with a highly interactive and dynamic learning experience. The prerequisite for this course is Corporate Finance (MGT 561) or equivalent graduate Finance courses. All in-class discussions are in English.

#### MGT563 Investment Analysis

The course serves as an introduction to the theory of investments. It will address the major concepts and issues associated with the allocational role of financial market. It will cover a theoretical foundation for the portfolio choice, the valuation of financial securities, the financing and investment decisions of firms, and the structure of financial markets.

#### MGT564 Microeconomic Analysis

This course aims to study various modern microeconomic models to understand complex market phenomena. It will provide students, especially those in economics related majors such as economics, finance, marketing and strategy with basic tools to think and analyze for their future research. Non-economics students will also benefit, not only from acquiring some basic knowledge of the market mechanism, but also from learning useful methods to tackle and analyze real-world problems. Although some basic mathematical

tools will be taught during the lecture, students are required to have basic knowledge of calculus.

#### MGT565 Economic Development of Korea

This course is a blend of a survey of various theories on economic growth and an analysis of the Korean economy. In order to build a framework for the analysis of the Korean economy, various growth models, including neoclassical growth models, endogenous growth models, and R&D-based growth models, will be studied. Based on the intermediate knowledge on economic growth, the process and characteristics of the development of the Korean economy will be analyzed and discussed. A working knowledge of calculus is needed.

First, we will review some stylized facts on economic growth. Then, by studying existing growth models, we try to understand why some countries produce much more output per worker than others. In particular, the focus will be on the mechanics of the accumulation of various production factors such as labor or human capital, physical capital, and technological knowledge. In addition, recent models emphasizing R&D (technology) and social infrastructure as major determinants of economic growth will also be studied.

Second, we will apply the predictions and implications of the various growth models to the evolution of the Korean economy. In doing so, we will discuss government policies, business strategies, and social infrastructure as well as future strategies for economic prosperity.

#### MGT568 Risk and Insurance

This course focuses on risk analysis, risk financing, risk control, and risk management. It provides students with a conceptual understanding of the existing services and products of various insurance fields that will serve as grounds for further developments of services and products.

#### MGT569 Futures and Options

This course introduces the pricing models used in options and futures markets, and risk management techniques. This is to help students understand options and futures in more detail by examining the structures of the markets, analyzing pricing models and examining related empirical results.

#### MGT572 Financial Statement Analysis

The course is designed to provide a framework to analyze financial statements and apply it in specific decision contexts such as investment and performance evaluation of a firm. It also covers business valuation and credit evaluation of a firm using financial statement analysis.

#### MGT574 Multinational Corporate Finance

This course extends the principles of finance to an international setting. International finance differs from purely domestic finance in at least two important ways. First, firms and individuals operating in an integrated world economy face the risk of fluctuating exchange rates. Second, international capital markets are highly imperfect, reflecting various barriers to cross-border capital flows, such as excessive transaction costs, information asymmetry, and legal / institutional regulations of foreign exchange and capital markets. Throughout the course emphasis is placed on how to deal with exchange risk and market imperfections using various instruments and techniques available while maximizing the benefits from the expanded global opportunity set. Major topics of the course include foreign exchange markets (spot, forward and options), determination and forecasting of the exchange rates, foreign exchange risk management, international portfolio investments, international capital budgeting, and international management.

#### MGT575 Global Financial Markets

The course applies principles of finance to the international setting. The existence of multiple currencies adds both opportunities and risk to investment and financing decisions. The course will discuss the determination and volatility of foreign exchange, barriers to international capital flows and international

diversification and risk hedging. The applications of these themes will range from portfolio management strategies to corporate financing decisions.

#### MGT577 Macroeconomic Analysis

This course serves as a graduate course in the field of Macroeconomic Analysis. The course will cover advanced theoretical models and empirical analyses on macroeconomic aspects. The topics are (1) the Ramsey model and Overlapping-Generation models, (2) classical and endogenous economic growth theories and empirical analysis, (3) traditional and Real-Business-Cycle economic fluctuations, (4) microeconomic foundations of incomplete nominal adjustments, (5) advanced theories and empirical analysis of investment and consumption, (6) macroeconomic aspects of monetary and fiscal policy, and (7) open macroeconomic aspects of technology and innovation.

#### MGT578 Supply Chain Strategy

This course covers theories and empirical cases in operations strategy for both manufacturing and service industries. Specific subjects include manufacturing capability, new product innovation, supply chain coordination, global operations, and value chain sustainability.

#### MGT579 Humanities for Managers

In this rapidly globalizing and changing world, anybody aspiring to become a corporate manager is required to inculcate certain fundamental knowledge and gain understanding of human affairs in the educational process. This course is intended to offer such training in basic humanities, including literature, history, philosophy, arts etc.

#### MGT587 Introduction of Internet Technology

This course comprehensively introduces students to the basic concepts and architectures of various Internet technologies, which are essential, or at least beneficial, for understanding and developing Internet applications. Covered are those areas such as Internet protocols, including those for the next generation Internet, E-business applications, and the enabling broadband telecommunication infrastructure. Emphasis is placed on providing insight on how all these technologies are put together to render the ubiquitous and omnipotent Internet.

#### MGT588 Quantitative Analysis for Management II

This course enables MBA students to understand quantitative analysis methods for management. The quantitative techniques that are covered include optimization and decision tree analysis under uncertainty. These techniques are applied to business cases with excel.

#### MGT590 Cross Cultural Management

This course is designed to provide participants with an intellectual and an experiential forum for developing the interpersonal, intercultural communications and interaction skills necessary for international managers. As we move into the 21st century, where globalization is taking root and demographics are changing, it is vital that our workforce has a solid and practical understanding of the interrelationships between the self and world economy. The ability to communicate cross-culturally and understand diverse perspectives is a necessity in order to achieve a competitive advantage in our global economy. This course is much more than the study of cross cultural communication. It involves the study of international business practices and managing diversity in the context of understanding multicultural and international affairs.

#### MGT591 Global Immersion Practice

The primary objective of this course is to help MBA students to grow as global managers through global / international experiences. This course consists of subjects such as global leadership, international negotiation, global management principles, community services, etc, that encourage students to experience

and practice what they have learned in classroom lectures.

#### MGT594 International Studies

This course offers the KAIST graduate business students an engaging experience on how business operates in the United States and China (or other region(s) of current interest) in comparison to South Korea. The economic, regulatory and managerial issues faced by multinational organizations—including ethical issues—intra-organizational relationships; and the business outlook and opportunities for the region as governmental and economic structures change are also addressed.

#### MGT595 Analysis of Chinese Political Economy

This course is designed to help students understand the system of Chinese political economy and to gain insight into the Chinese economic system by studying and analyzing various components of Chinese politics, administration, economy and business environment

#### MGT596 Business Practices in China

This course is designed to help students understand the unique business practices in China by providing fundamental knowledge and specific cases.

#### MGT597 Laws on Investment in China

The purpose of this lecture is to help the students understand the various legal system and practice relating to investment in China, in order for them to make informed decisions in uncertain situation relating to investment in China.

#### MGT598 The analysis of chinese industry

The objective of this course is to analyze the Chinese economic and trade structure and to map out the current conditions and possible improvement of economic cooperation between Korea and China; to improve students' work ability and to help choose the career through detailed analysis on China's main industries such as electronics, automobile, textile, etc.

#### MGT599 Negotiation in China

The purpose of this lecture is to provide the students with basic knowledge necessary for negotiation with Chinese and the hands-on opportunities to exercise the measure which can be taken in various situation in the course of negotiation with Chinese.

#### MGT604 Human Resource Management Systems and Strategy

This course focuses on how to design and execute human resource management strategies. The course objective is not to deal with technical details of personnel management (e.g., the specifics of job evaluation methods, the mechanics of interviewing, the specifics of employment law, the psychometric aspects of test validation), but to address fundamental human resource issues from a strategic perspective, adopting a general manager's viewpoint. Having an effective system for obtaining, mobilizing, and managing the organization's human assets should be as important as other value-creating activities such as conceiving of innovative product design, forging a successful marketing strategy, cultivating an advanced production technology, all of which are critical in enhancing the firm's competitive advantage in the global market. This course adopts an integrative perspective, drawing upon fundamental courses constituting the core curriculum in management. It covers both analytical and managerial approaches to develop the concepts and strategies that enable general managers enhance the value of human resources (i.e., people) in their organizations.

#### MGT605 Business Communication

This course focuses an intensive practice to enhance skills for English presentations, writing, and

negotiation. Principles for business communication are introduced and students are requested to exercise in several situations following specified guidelines.

#### MGT606 Intellectual Property Management

This course is designed to provide students with key issues regarding intellectual property, whose importance today cannot be overemphasized, in terms of its strategic management for profit maximization. It will cover strategic management issues of patents, trademarks, designs, trade secrets, and copyrights through diverse classroom activities including lectures, case studies, and group discussions.

#### MGT607 Basic Laws of Management

Law continues to become more and more important to managers. This course attempts to provide an integrated treatment of law and management that shows how the law provides ways for managers to minimize risk while creating value and attaining core business objectives. It covers agency, contracts, sales, e-commerce, torts, and product liability.

#### MGT608 Legal Aspects of Business Association

The fierce competition in today's open, global market requires managers and entrepreneurs to successfully perform three main tasks: Sourcing, corporate learning, and market positioning. This course will cover various forms of business organizations created to achieve these three tasks, the advantages and disadvantages of each form, corporate governance issues, the rights & duties of directors, officers, and major shareholders, public and private offerings of securities, securities fraud and insider trading.

#### MGT609 Research Methods

This course will serve as the basis for the understanding of a broad overview and state-of-the-art research methodology in Management. The course provides students with the capabilities they need to write a masters thesis and to understand research papers. Students are expected to learn how to apply research methodology to perform actual research projects.

#### MGT612 Organization Management Strategy

This course is designed to provide an intermediate level of knowledge in organization management. It begins with an introduction and basic concepts of organization design, and covers various organizational factors which have a significant impact on organizational effectiveness.

#### MGT614 High Tech Management

This course deals with major issues related to management of high technology firms. The main focus will be on making marketing related decisions for high-tech firms. We will discuss issues on opportunity identification, marketing research and demand forecasting, creating and managing products, pricing, communications, and channel strategies, and market evolution related to high-tech firms. We will also spend some time defining high-tech marketing and identifying strategic issues unique for the high technology based firms.

#### MGT615 Management Decision Laboratory

Management Decision Laboratory is designed to offer students the experience of running a business enterprise. The course makes use of a sophisticated computer simulation called Intopia 2000. The simulation compiles the quarterly decisions of student teams and calculates 'firm' performance. Intopia is a living case study in strategic management. The simulation offers more dynamism and realism than a written case or just about any other classroom experience. The outcomes are not known in advance, conditions change from period to period based on the actions of student teams, and 'firm' performance depends on the quality of team decisions. Teams manage and operate every aspect of a 'firm' from long-term strategic policies to operational level decisions. The setting is high technology. The problems

that a team faces are those typically dealt with by top managers. What lines of business are we in? What modes of entry will we use to enter foreign markets? What will our pricing policies be? How will we react to technological advances? Intopia is a capstone experience which will draw upon the collective experiences and talents of your team. The intensity of the experience and the sheer number of skills necessary will demand that each team member contributes and cooperates.

#### MGT617 Management Consulting

This course is designed as a capstone program for MBA students to integrate their knowledge and experience in various management areas. Students, as a team, must contact the firm they are interested in and execute consulting projects to advise solutions for its management problems. The performance of their consulting outcomes will be evaluated by the managers of their client firms.

#### MGT620 Marketing Theory

This course introduces main research areas in Marketing. The students will deal with basic research issues and representative academic studies on the issues for each of the areas. They will also discuss fundamental theories studied in Marketing as well as their applications.

#### MGT621 Quantitative Models for Marketing Decisions

This course introduces how marketing models are developed and applied for improving various marketing decisions. Current, available models are analyzed to show how OR and statistical methods are applied for advertising, pricing, sales force, promotion, new product, and distribution decisions. Also, opportunities to develop and use models will be offered by analysing case studies and completing of term projects.

#### MGT623 Promotion Management

Among various marketing activities, Marketing Communications (or Promotions) directly connect consumers and firms. Among promotion activities of a company, budgets for advertising and sales promotions amount to 60-70% of the total promotion budgets. This course will deal with concepts, roles, and effects of advertising and sales promotions. Also, it will deal with major theories explaining how consumers respond to the advertising and sales promotions.

#### MGT624 Consumer Behavior

This course deals with issues related to purchasing and consumption by the consumer. We are mainly interested in understanding and predicting consumer behavior based on theories of consumer psychology. Emphasis will be given more to cognitive theory and social cognitive psychology. We will also spend some time on consumer attitude theory that is valuable for predicting consumer behavior. For every issue, we will also spend some time discussing consumer behavior in the internet environment.

#### MGT626 Marketing Channels Management

Distribution is to deliver products and services to end-users. In this course students learn what functions are needed for effective and efficient distribution, who channel participants are to undertake the functions, and how the participants are organized and governed. This course also offers opportunities to acquire the knowledge and skills to manage a firm's distribution channels so as to reach its marketing objectives. Any student with a background of organizational behavior and industry organization will particularly benefit from this course.

#### MGT628 Service Strategy

This course discusses key elements of the design and management of successful service models. Students learn through a series of case studies how to change, extend and multiply core service models. Strategic topics in managing service operations, such as service supply relationships, growing and globalizing services and yield management, are also included.

#### MGT629 Business and Management in East Asia

The course aims to upgrade students' knowledge and insight about the economy and business of the East Asian region, with special emphasis on four countries of Korea, Japan, China and Taiwan. The course focuses on the following four topics: institutional characteristics of the region's economy, ownership and governance of large corporations, strategy and management of major firms, and production and innovation networks developing in the region.

#### MGT632 Service Management

The focus of this course is on the management of service operations to achieve a competitive advantage in the service sector. This course will cover theories and tools to design service process and facility location, to develop new service, to achieve better service quality, and to forecast demand for services. Their real-world applications will also be discussed using case studies.

#### MGT633 Venture Capital

The paradigm shift of Korea from the conglomerate to small & medium firms, particularly the start-ups, has been an important issue in recent years. This deals with the venture capital industry and how corporate finance concepts are applied to venture capital. Also, invited venture capitalists and entrepreneurs discuss on their experiences and issues facing their particular industries.

#### MGT635 Economic Assessment of Technology

Economic analysis and evaluation in technological issues including environmental ones are the main concerns of this course. Issues covered include cost-benefit analyses in science and technology, venture investment, environmental issues with water resources & pollution, and economic development.

#### MGT641 CRM and Service Management

This course approaches CRM as a partnership between company and customer and introduces critical concepts and methods such as customer value, customer asset value, CRM vision and strategy, CRM strategic planning methodologies through real world cases and industry expert lectures. After completing this course, you will be able to understand the critical CRM issues, conduct a CRM strategy planning project, and analyze the feasibility of CRM investment.

#### MGT642 Financial Information Systems

The main topics include basic concepts of financial management, DSS for financial planning, analysis of financial conditions related to the accounting information system, the information system for analyzing engineering economic data, the investment advisory system for securities, the information system for financial institutions, development of a financial network, systems for future transactions and financial payments, and home banking. Financial experts in the field are frequently invited to speak.

#### MGT643 Accounting Information Systems

The objective of this course is to help students develop a level of competence so that they are capable of understanding the theoretical as well as practical issues in applications of the most up-to-date information technology for accounting. The topics include the analysis and design of accounting information systems, accounting database, and IS control and audit. The accounting implications of ERP, Electronic Commerce, and advanced information technologies are studied.

#### MGT644 Advanced Accounting

This course is designed to study the topics presented in the introductory accounting course in more detail. The topics include all the areas of accounting such as lease accounting, pension accounting, accounting for

derivatives, and deferred tax, etc., other than consolidation and government accounting which are covered in the advanced accounting course.

#### MGT650 Data Mining

This course presents techniques for identifying valid, novel, useful and understandable patterns in data. It introduces predictive models from data: classification, regression, and probability estimation, and it discusses the discovery of clusters and association rules.

#### MGT652 Consulting Methodology

The aim of the course is to provide the students with theoretical and practical knowledge in consultation work. It deals especially with basic techniques for consulting and in-depth case studies, so the students can get opportunities to consult.

#### MGT653 Law and Economics

This course aims to provide the students with the economic tools for analyzing the effects of various legal rules and making policy recommendation.

#### MGT654 Introduction to Law

Students will learn how to think like lawyers by studying basics of legal reasoning, analysis and writing.

#### MGT655 Commercial Law

In this era of exploding commercial transactions based on movable property type collaterals, which are already well-established in the developed countries, the learning of the governing legal require in this area is crucial for capable managers of global perspective.

#### MGT656 Intellectual Property

The aim of this course is to provide a grounding in the US trade secrets, copyright, patent, and trademark law.

#### MGT657 International Tax

The addresses in a detailed fashion the international tax consequences, from a US perspective, of transactions carried out by individuals and corporations.

#### MGT658 Commercial Sales

This course is designed to provide students with laws and cases of commercial transactions based upon the Uniform Commercial Code which plays a prototype role in international transactions. It will emphasize on diverse commercial transaction issues including the differences between Common Law principles and the UCC rules, remedies to breach, secured transaction, and bankruptcy.

#### MGT661 Mergers and Acquisitions

This course will cover various topics concerning mergers and acquisitions. Topics include theories and empirical evidence on M&A, valuation of a firm, takeover defense strategies, accounting issues in M&A, legal aspects of M&A, corporate governance issues in M&A, and IT problems in M&A.

#### MGT663 Securities Markets

This course examines the characteristics of different types of securities, how they are issued in the primary market, and how they are traded in the secondary market. In addition, this course examines regulations in securities markets. The course also studies empirical papers that examine various issues related to securities markets.

#### MGT664 Strategic Fixed-income Securities

This course provides the concepts and analytical tools for bond portfolio management. The bond valuation model, the estimation of an implied spot curve, duration, convexity, and immunization are major issues to be dealt with in this course. After students are equipped with skills such as traditional bond analytics, these concepts are extended to address how to identify and manage risk in the real world.

#### MGT667 Finance and Society

This course studies management theories and practices of socially responsible business in the finance sector. The course addresses the political, social, and environmental issues which the finance sector currently faces and deals with socially responsible investment (SRI), social purpose financing, and corporate social responsibility (CSR) of finance firms.

#### MGT672 Financial Risk Management

We have seen tremendous increases in uncertainty in the financial markets due to drastic changes in the financial environment. This course is designed to introduce students to basic issues of financial risk management including the definition of risk, measures of financial risk and the concept of financial risk management. It focuses on various risk management techniques including value-at-risk developed to deal with the problems associated with the changes in the financial environment. It covers how to handle practical problems for financial institutions and firms arising from when they apply risk management techniques.

#### MGT673 Advanced Derivative Securities

The course covers characteristics and the valuation models for a variety of derivative securities. It will focus on the theory and computational methods to value exotic options, interest rate dependent options and corporate securities with option features.

#### MGT678 Management Accounting

This lecture covers the basic concepts and foundations for management accounting, cost allocations, performance of divisions and individuals, decision-making using management accounting information, and cost and benefit analysis. The state of art of traditional cost accounting for example departmental accounting, job order accounting, process accounting, standard cost accounting will be presented as the base of management accounting. Activity-based costing, strategic cost accounting, balanced scorecard, and capital budgeting will be presented in the advanced course.

#### MGT688 Special Topics in Technology Management I

This is a special course reserved for new topics in the techno management area of current interest or of potential for regular course development.

#### MGT689 Special Topics in Technology Management II

This is a special course reserved for new topics in the techno management area of current interest or of potential for regular course development.

#### MGT712 Energy and Environmental Law

The purpose of this course is for students in Green and Carbon Finance MBA program to provide an overview of energy and environmental law and study the intersection among energy and environmental law, trade law, and competition law.

#### MGT713 Strategic Sustainability Consulting

The purpose of this course is for students in Green and Carbon Finance MBA program to understand consulting methodology related to strategic sustainability in the context of climate change.

MGT714 Climate Change R&D Strategy

The purpose of this course is for students in Green and Carbon Finance MBA program to provides an overview of strategic management of technology and innovation in the context of climate change.

MGT715 Climate Change Science

The purpose of this course is for students in Green and Carbon Finance MBA program to understand backgrounds and theories on climate change science and explore business opportunities.

MGT716 International Negotiation

The purpose of this course is for students in Green and Carbon Finance MBA program to provides an overview of negotiation theories and practices of international importance - bilateral, regional and multilateral.

MGT775 Special Topics in Management I

MGT776 Special Topics in Management II

MGT777 Special Topics in Management III

MGT900 Korean Business and Culture

This course is offered for incoming exchange students and foreign students who need and desire a basic understanding of Korean society, the Korean business environment and Korean language. Classroom lectures will cover the areas of politics (domestic and Asia region), society, business, mass media, and the characteristics of the Korean Economy. Field trips to the industry area will be planned to help enhance understanding. With this basic understanding, students will acquire skills for doing business in Korea.

MGT960 Thesis for Graduate Students

MGT965 Independent Study for Graduate Students

MGT966 Seminar for Graduate Students

MGT997 Project Study (Management Consulting Project)

This is the capstone course for the KAIST MBA program. It enables second-year MBA students to integrate what they have learned from the courses taken for the last three semesters, which include diverse management disciplines from marketing, strategy, finance, accounting, to supply chain management and IT. From this course, the students should endeavor to understand how to solve real managerial problems that involve complex cause-and-effect relationships associated with all of the value-creating activities a firm must perform to be competitive in the global market. In this course, students work as teams of 4-5 second-year MBA candidates, preferably with diverse professional and academic backgrounds so that teammates complement each other's abilities and experience.

MGT998 Internship Program

This course is designed to provide students with realistic field experience in the management area. Students will participate in special projects or in daily operation tasks in the consulting, manufacturing or service industries. They are expected to apply management theories, and practice what they have learned from other courses, to have hands-on experiences, and to build a personal network with other industrial experts during the course.

MGT999 International Internship

This course was created to provide MBA students with an improved understanding of global issues and equip them with professional and international competence. This internship program will develop practical

skills that integrate a student's academic learning into real life situations. In addition, this internship program will allow students to experience collaborative and multicultural work, as students work side by side with non-Korean employees and within different work and management contexts.