### **Descriptions of Courses**

# A. Mandatory Major

# MIP501 Information Technology IT

This course is designed to provide basic understanding of the state-of-the-art information technology ("IT"). KAIST professors with worldwide reputation in this field will guide the students to be equipped with essential knowledge and up-to-date information to lay a solid foundation in accomplishing their professional tasks. It is an intensive workshop program.

# MIP502 Environment Technology ET

This course is designed to provide basic understanding of the state-of-the-art environmental technology ("ET"). KAIST professors with worldwide reputation in this field will guide the students to be equipped with essential knowledge and up-to-date information to lay a solid foundation in accomplishing their professional tasks. It is an intensive workshop program.

# MIP503 Biotechnology BT

This course is designed to provide basic understanding of the state-of-the-art biotechnology ("BT"). KAIST professors with worldwide reputation in this field will guide the students to be equipped with essential knowledge and up-to-date information to lay a solid foundation in accomplishing their professional tasks. It is an intensive workshop program.

# MIP504 Nano Technology NT

This course is designed to provide basic understanding of the state-of-the-art nanotechnology ("NT"). KAIST professors with worldwide reputation in this field will guide the students to be equipped with essential knowledge and up-to-date information to lay a solid foundation in accomplishing their professional tasks. It is an intensive workshop program.

#### MIP505 Convergence technology CT

This course is designed to provide integration and application skills of the respective advanced technology subjects. KAIST professors with worldwide reputation in each field will guide the students to be equipped with advanced skill sets to apply integrated knowledge on the technologies to the IP practices. It is an intensive workshop program held in KAIST Daejeon campus.

# MIP602 Future Strategy

In this course, we will introduce scientific methodologies for estimating the change of future society. Based on this, we will highlight solving methods for the problems that mankinds are encountered based on science and technology. To meet this, we will invite specialists from various fields who can forsee the future in fusion ways, have lectures, and discuss about them. The purpose of this lecture is to search for the grand progress directions for the future of Korea.

# MIP605 Future Studies & Foresight

This course overviews various methods on foresight including Delphi, Scenario, Trend, Emerging issues, Three dimensional methods. The methods are compared with application examples, and pros and cons of each method will be discussed

# MIP636 Introduction to Global IP Laws

This course is designed as an introduction to mandatory courses regarding global IP laws and management issues. It will provide students with key global IP law knowledge focusing on the Federal IP laws of the USA. It will cover key legal issues of patents, trademarks, designs, trade secrets, and copyrights though diverse classroom activities including lectures, case studies, and group discussions.

# MIP637 Global Patent Law

This course is designed to address key patent law issues that are regarded essential to survival and prosperity of businesses and nations today. Patent law is the area where fundamental principles of IP laws and critical issues for today's business activities are concentrated. This course will guide students to study key issues though lectures on key legal principles and responsive case studies regarding the US patent laws and practices.

# MIP638 Global Trademark Law

This course is designed to address key trademark law issues that constitute legal backdrop of brand management whose importance is growing in conducting business activities. This course will provide students with opportunity to study key trademark issues of the United States, where global enterprises compete against each other fiercely, though diverse classroom activities including lectures and case studies.

## MIP639 Global Design Law

This course will provide fundamental knowledge on design patent law of the USA. Students will be exposed to the key issues of design protection and leading court decisions. The topics include requirements for design registration, design infringement, and remedies. Diverse classroom activities including lectures, case presentations, and group discussions will be utilized.

# MIP641 Global Copyright Law

This course will provide fundamental knowledge on copyright laws of the countries including the USA, the EU, China, and Japan. Students will be exposed to the key provisions of each copyright law and leading court decisions. Diverse classroom activities including lectures, case presentations, and group discussions will be utilized. The topics include: authorship, fixation, idea-expression dichotomy, infringement, fair use, remedies, work for hire, first sale doctrine, digital copyright, Digital Millennium Copyright Act, etc.

# B. Elective

#### MIP600-1 Leadership & Communication I-II

The basic principle of leadership and cases are introduced, and the communication training is provided with case studies. The students will be asked to present their experiences on the successful leadership and communication.

#### MIP603 Future Strategy & IP

In this course, we will estimate the change of future society in the 21st global era and highlight important science and technology for solving the emerging issues that the earth and mankinds are encountered. Moreover, the role of science culture in the era of fusion will be introduced. We will invite strategists from various fields, have relay lectures, and discuss with the lecturers. The purpose of this lecture is to search for grand development strategies for the future of Korea throughout the class.

# MIP604 Innovation Management Strategy

The focus of today's successful business management is on the creation of intellectual capital and value appropriation through prosecution and commercialization. This course is designed to provide fundamental knowledge required for the chief intellectual property officers who are equipped with both IP practice experience and strategic mind-set at the same time. Throughout the course the students can develop strategic management concept based on intellectual capital strategy as well as the traditional analytical frameworks of strategists including Michael Porter.

# MIP631 Introduction to Intellectual Property

This course is designed as an introduction to all following MIP courses 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 though diverse classroom activities including lectures, case studies, and group discussions.

# MIP633 Strategic Patent Development

This course is designed to enable students to link their practical knowledge on patenting with business strategy. Students will be exposed to the situations where they have to decide: (1) which technologies need to be patented; (2) how to avoid possible patent infringement claims from the competitors; (3) how to protect the core technologies of the firm; and (4) how to leverage negotiations in business transactions such as licensing and M&A. Technology life cycle approach is adopted to explain key principles throughout the course.

## MIP634 US Patent Litigation

This course will provide practical knowledge and experience in the US IP litigations. It is quite a unique case study of a representative multinational company based in Korea which is experiencing diverse IP litigations in many parts of the world. Key Topics are: the difference between courts and litigation cultures; Strategy for Successful IP litigations in USA.

#### MIP635 Patent Dispute Strategy of Global Firms

As more Korean companies become global players, they are faced with many patent disputes in the global market. In the knowledge economy, the ability to resolve against patent disputes is an important enterprise skill. This course focuses on patent dispute strategies in major countries such as US, Germany, and Japan.

# MIP640 Global Anti-trust & Regulatory Environment

This course is designed to help students understand fundamental legal issues regarding global IP transactions with special emphasis upon anti-trust law and policy of the USA. The instructor will stress the interplay between the monopolistic structure of IP regime and anti-trust policy considerations. This course will provide students with ample opportunities to study key legal issues on anti-trust and other business laws governing global transactions though lectures and case studies.

# MIP642 IP Integration Project

This course is designed as a team project where students apply their knowledge from previous MIP courses on technology (IT, ET, BT, NT), law, and business, and integrate their practical experiences in the team to resolve contemporary issues in intellectual property fields. Each team will be composed of three or four students whose backgrounds are diverse, so that they may experience synergy effect to have three dimensional perspectives on various IP practice areas. The project will be presented in a colloquium at the end of the semester

#### MIP643 Global Trade Secrets

This course will explore the issues regarding trade secret protection of the USA. The issues will include trade secret requirements, infringement analysis, and remedies. Special emphasis will be given to the delicate balance between trade secret protection and economic freedom to depart from one company to another. The instructor will guide students to study key issues though lectures on key legal principles and responsive case studies under the state trade secret laws and the Uniform Trade Secret Act.

# MIP701 Global Patent Prosecution Practice

This course is designed to train students to acquire knowledge and experience required for practices of patents in the USA. Tailored classroom exercises will help students be trained in the tasks including: (1) how to draft patent claims, (2) how to correspond with the patent offices, (3) how to strategically utilize different types of application, (4) how to avoid legal risks found in prosecution history, (5) how to conduct effective DB searches, etc. Years of professional experience in any jurisdiction is strongly recommended, although not required, for students to take this course.

## MIP702 Global Patent Examination Practice

This course is designed to provide knowledge on patent examination practices in the patent offices of foreign jurisdictions including the US Patent and Trademark Office. Students will be greatly benefited by learning patent examiner's perspectives on the claim constructions as well as the strategic guidelines for efficient office action.

# MIP703 National Intellectual Property Strategy Planning

This course is designed to help students understand perspectives of IP policy makers focusing on the initiatives of the Intellectual Property Commission under the Presidential Office and Korean IP Office. It deals with contemporary issues including: IP law reforms; harmonization efforts among different jurisdictions; policies on developing science, technology, culture, and arts; and IP implication of the WTO, FTA, and other international trade issues.

### MIP708 IP Practice Colloquium

This course is designed to provide advanced knowledge and experience of the intellectual property practice. Most successful practitioners including patent attorneys, government officials, and CPO's will address key contemporary issues of IP practice. Students can participate in the classroom discussions and find opportunities to build their

professional networks.

# MIP711 Brand and Design Management Strategy

This course is designed to provide concrete knowledge on the brand and design management strategy of multinational corporations. Through case studies, group discussions, and lectures, students will acquire strategic frameworks and skill sets to make profits using distinctive trademarks, CI's, and industrial designs.

#### MIP712 IP Litigation of the US Courts & ADR

This course is designed to provide practical knowledge on IP litigation procedures and Alternative Dispute Resolution ("ADR") mechanisms of the United States. Fundamental approach of this course is the case study. Students will explore the IPcases of the US district courts, CAFC, and the US Supreme Court as well as mediation and arbitration cases.

## MIP713 Global IP Strategy Special Lecture

This course is designed to provide fundamental understanding on IP management practice of a successful multinational company based in Korea. To achieve this goal, an instructor leading the IP department of a very successful Korean company will share practical knowledge and experience in IP business with the students.

# MIP714 Global IP Management Strategy

This course is designed to provide practical knowledge and know-how on IP management based upon the real life business management cases of both foreign and domestic companies that are exemplary in their strategic development and maneuvering of IP assets. The course is basically conducted by case study and analysis, and if necessary the IP professionals in the firm may participate in classroom activities.

#### MIP715 Global Business Law Seminar I

This course is designed to provide fundamental knowledge on contracts, commercial law, corporations, torts, and taxation as background knowledge for understanding global IP laws. Through statute interpretation and case analyses, students will acquire adequate knowledge and skill to apply legal principles to real life cases. Students pursuing dual degrees can preview major law subjects by participating in this course.

### MIP716 IP Information Search & Analysis

This course is designed to facilitate students to acquire knowledge and experience in intellectual property information management. The topics include: (1) where to find useful IP information, (2) how to conduct library and DB searches efficiently, (3) how to use relevant software, etc. This course will emphasize on patent mapping and analysis necessary for strategic management of patent portfolio. Students will learn that IP information management is essential to both the successful defenses and offenses in case of IP infringement claims.

#### MIP717 Financial Engineering

This course aims to build up the knowledge on various subjects in financial engineering, including financial instruments and quantitative models for intellectual property securitization & investment management. Students will study equities, fixed income securities, and derivatives and discuss about their pricing models and investment strategies. Excel and VBA will be used for homeworks.

# MIP718 IP Licensing Practice

This course is designed to provide practical knowledge and skills in intellectual property contract making and licensing. About licensing issues, this course will cover patent licensing; trademark/brand licensing, and copyright (artworks and character) licensing. It will also address other IP contracting issues such as employment contract, NDA (non-disclosure agreement), and mass licensing of software.

#### MIP719 M&A & IP Due Diligence

The notion of due diligence is originated from the US federal securities regulations. But now it is being widely applied to, for example, the preliminary investigation procedures before mergers and acquisitions of firms. Due diligence in IP context implies fair and equitable criteria on evaluation of IP assets and due process in IP transactions. This course will provide practical knowledge on IP due diligence through interpretation of the statutory laws of the USA and case studies.

#### MIP720 English Speech & Writing

This course is designed to help students develop basic English speech and writing skills that are necessary for

their global practice. Throughout the course students will acquire skills to express their thoughts, communicate with others, and make public speeches. In addition, they will be instructed to draft and edit scripts for presentation through lectures and exercises. This course will create the so-called "learning language skills by doing" environment where both students and native speakers of English actively participate for collaboration.

# MIP721 European & Chinese IP Litigation Practice

Korea-EU FTA will enable companies of both regions to expand business transactions, but legal disputes over IP rights will also increase. And the FTA negotiation between Korea and China is going on toward a meaningful conclusion, while the influence of Chinese economy is ever growing these days. This course is, therefore, designed to provide practical knowledge on IP litigation procedures and strategic aspects of the EU & China. Students will be exposed to representative court decisions and study litigation strategy as well as litigation procedures of the chinese & European courts.

### MIP722 Chinese IP Litigation Practice

This course will provide practical knowledge and experience in IP litigations held in China. Differences of Chinese IP laws and procedures from jurisdictions will be highlighted. Through the case studies, students will learn the fundamental issues about IP infringements: direct and indirect infringements, measuring damages, injunctions, etc. Students will also learn how to prepare and conduct the oral arguments, how to establish the legal claims, how to manage negotiations in and out of the court rooms.

## MIP723 International IP Negotiation

This course will provide students with very interesting classroom experiences conducting IP negotiation simulations. The instructor will coordinate the group discussions and two party or multi party negotiations with the specific tasks of distribute bargaining, integrative negotiation, and international negotiations with awareness of cultural differences.

# MIP724 International IP Field Trip

This course is designed for an on-site practical education of IP in the USA. It will facilitate students to attend seminars at leading patent law firms such as "Finnegan, Henderson, Farabow, Garrett & Dunner, LLP" at Washington D.C., visit the USPTO and federal courts, and meet patent attorneys, judges, examiners, scholars, CEO's, and other experts in intellectual property.

### MIP725 FTA and IP Strategy

Korea's recent FTA's with the EU and the US will enable companies to expand business transactions with their counterparts in those economic blocks. On the other hand, legal disputes over IP rights will increase also. This course is, therefore, designed to provide practical knowledge on IP strategies of Korean companies responding to such regulatory changes. This course will cover the topics such as fundamental principles and structures of FTA agreements, characteristics of the US and the EU markets and their rules for transaction, provisions in the FTA agreements and corresponding legislations, IP strategies to respond to the changed circumstances, etc.

# MIP726 Global Business Law Seminar II

This course is designed to provide fundamental knowledge on Common Law subjects that are not covered by the course Global Business Law Seminar I. Through case analyses and, if necessary, statute interpretation, students will acquire adequate knowledge and skill in the fields of UCC Sales, Federal Civil Procedure, and Professional Responsibility. Students pursuing dual degrees can preview major law subjects by participating in this course.

# MIP727 Introduction to the IP Rights of the Reunified Korea

Recent political and economic adversity in North Korea generated talks over possible reunification of two Koreas in the near future. However, little is known about possible confusion and misunderstanding of legal systems of both Koreas that will ultimately collide when a peaceful reunification comes true. This course is, therefore, designed to discuss issues on how to harmoniously resolve conflicting political and legal interests in the field of intellectual property, and how to prepare reunified legal norms in the field of intellectual property.

# MIP801-5 Special Lecture I-V

This course is designed to provide knowledge on most recent IP issues and state-of-the-art technology issues through special lectures, seminars, and on-site tours. The special lectures and seminars will be offered each semester with the topics of the most recent court decisions, technological innovation, changes in laws and policies,

and economic situations. The target companies or organizations for on-site tours will be determined based upon students' interest and the firm's IP management performances.

## MIP806 IP Management Practice: Samsung Electronics

This course is designed to provide practical knowledge and know-how on IP management based upon the real cases in the field. The course is basically conducted by case study and analysis, and if necessary the IP professionals may participate in classroom activities.

# MIP807 IP Commercialization and Finacing

This course is designed to facilitate students to acquire knowledge on commercialization and financing issues to fully extract values contained in IP assets. To achieve this goal, the course will focus on real business cases where companies adopted strategic decisions and applied financing schemes including secured transactions and securitization of the IP assets.

#### MIP808 IP Finance

Secured lending based on intellectual property rights as collateral and securitization of them using the special purpose vehicles are frequently discussed in advanced countries. Due diligence in IP context implies fair and equitable criteria on evaluation of IP assets and due process in IP transactions. This course will provide practical knowledge on IP finance including secured lending based on intellectual property rights, securitization, and due diligence.

# C. Research

#### MIP956-7 M.S. Thesis Research I. II

This course is for those students who will draft dissertations to meet the graduation requirements. Through collaboration with their thesis advisors, students will conduct literature review, case studies, and numerical analysis to complete their own disserations. Special lectures on research & analysis methods and colloquia can be arranged by agreed decision of the thesis advisors.

# MIP965 Independent Study in M.S.

This is a research course for individual research. And this course is designed to provide fusion knowledge of IP by undertaking case studies of IP businesses. The project will integrate technology, law and management element by including technology planning, patent application & management, patent protection issues and finalize project by oral presentation at the end of the semester.