

## ■ Master & Ph.D. Program

<b>Major Requirements</b>	
<b>ITP610</b>	<b>Introduction to the Latest IT Technology R&amp;D in Korea</b>
Twelve professors in the School of Engineering of KAIST ICC will introduce the basic concept and the R&D trends of the state-of-the-art IT technology in Korea. This course will provide the students with broad knowledge on the latest IT technology development in Korea and understandings of other countries' situation and problems in IT industry through the presentation of term project results.	
<b>ITP620</b>	<b>Introduction to IT Technology Management/Policy in Korea</b>
Ten professors in the School of IT-Business of KAIST ICC will introduce the basic concept and recent trends of IT technology management and policy issues in Korea. This course will provide the students with broad knowledge on the latest technology management and business/policy issues in the Korean IT industry. Also understandings of other country's situation and problems in IT industry through the presentation of term project results.	
<b>Elective Major Courses (Engineering Major Field)</b>	
<b>ITP700</b>	<b>Wireless Communications in Korea</b>
This course is aimed at understanding 1) Basics of Digital Communications, 2) Basics of Data Communications and Networks, and 3) Applications of Wireless Communications in Korea.	
<b>ITP701</b>	<b>Ubiquitous Computing in Korea</b>
This course is intended for graduate students. This course covers the fundamentals of ubiquitous computing and its deployment in Korea. The first part of the course focuses on the main components of the ubiquitous computing infrastructure such as location sensing, context management, service discovery, and dynamic service reconfiguration. The second part of the course is an analysis of and discussion of several successful cases of ubiquitous computing in Korea.	
<b>ITP702</b>	<b>Software Engineering in Korea</b>
This is an introductory course to software engineering. In this course, students will learn the major software engineering issues such as software requirements, design, process, and management. Students will also conduct team projects to practice how to apply major software engineering concepts and methods to software development problems.	
<b>ITP703</b>	<b>BcN Technology in Korea</b>
This course covers an overview of broadband networking technologies including Broadband convergence Network (BcN), wireless mobile network and IPTV, and integrated network environments of fixed and wireless network. Also this course introduces network computing Grid clustering concept to provide distributed network computing as well as new trends of wireless and mobile network	
<b>ITP705</b>	<b>Research Design and Methods for Engineers</b>
This course is a seminar course designed to provide an overview of academic research for IITP students. This course covers diverse topics associated with academic research, including conceptualizing a research design, literature review, identifying variables, constructing hypotheses, data collection, instrument development, sampling, empirical analysis, etc. SPSS as a statistics analysis tool will be used to understand diverse quantitative research methods. Student will have a capability of absorbing the knowledge from diverse academic research articles and of applying the implication from the articles to the real business field.	
<b>ITP810</b>	<b>Special Topics in Global IT (Engineering)</b>
Covering the knowledge related to the engineering of the IT technology needed for the developing country government officers. Course will be lectured by the industry experts and the students will prepare country report on the topic. Topics will be changed flexibly.	
<b>Elective Major Courses (Management Major Field)</b>	
<b>ITP750</b>	<b>ICT Economics and Management</b>
This course is designed to understand economic principles behind IT Industry and policies and their applications in practical industry. Specially, telecommunications market is focused and several critical issues are discussed in the light of industrial organization theory in which 'market structure-market behavior-market performance' and 'network externalities' are considered as main analytical framework. Also, we review the past and current IT development strategies and policies	

and furthermore competition paradigm across socio-economic system in the network era.	
<b>I7P751</b>	<b>Internet Business and Management</b>
This course will focus on opportunities as well as strategies, platforms, and limitations of business over the Internet. The concept of electronic business (e-Business) and a number of alternative business models will be discussed. Business-oriented issues related to security of transactions will be discussed. Specifically, the course will address the technological foundations of the Internet and the macro environments of e-Business as determinants of profitability and influencers for business models. The students working in teams of 2-3 members each will be required to work on a project to develop a business plan for an e-Business initiative.	
<b>I7P752</b>	<b>Financial and Accounting Management in IT Industry</b>
Finance studies about financial decision making, and it is important to make wise financial decisions in real world. Whether seeking a career in finance or not, a well-educated industry leader will be expected to have a broad understanding of finance. Therefore, the objective of the course is to provide an overview of how financial management may be practically applied to financially phrased decisions. The course will cover how to make these decisions based on financial analysis and planning, valuation of securities, capital budgeting, risk and return relationship, and opportunity cost of capital, alternative corporate financing and capital structure. Classes are mainly composed of lectures and case presentations. Case exercises are used to grasp more applied knowledge that can be used in actual business situations. Upon completion of the course, students should be able to: - Comprehend accounting procedures - Analyze organization decision problems using accounting information	
<b>I7P753</b>	<b>IT Technology Management and Policy</b>
This course is a seminar course for students who are preparing thesis, research article, or country report. 10 Topics in the area of IT management & policy are specially selected for I7TP students, who successfully completed the research methodology course. Four articles (One short article + three long ones) in each domain are assigned to every week for discussion. All students are required to turn in four one-page summary reports on the articles assigned. Students will use knowledge acquired from the methodology course for preparing the report and presentation. To complete this course successfully, all students are requested to complete a piece of his/her own international-conference-level paper (research proposal) in his/her field at the end of this semester.	
<b>I7P755</b>	<b>Digital Convergence Strategy</b>
The age of digital convergence – in which the computer, the telephone, and the television are no longer distinct products with separate functions – is upon us. Whether at home, at the office, or in the classroom, we increasingly communicate, learn, and enjoy entertainment using video-on-demand, interactive television, the Internet, personal digital assistants. This course covers technologies, business strategies, and case studies regarding digital convergence. In the first section of this course, we cover the digital convergence technologies. Differences between conventional and emerging digital convergence technologies are discussed. At the second part, we discuss the business strategies of digital convergence, which includes service development, service bundling, co-marketing, and alliance strategies. At the final part, we will discuss future pictures in the digital economy through discussion on business cases of digital convergence, such as convergence of broadcasting and telecom, e-banking, u-city, IT ecosystem.	
<b>I7P756</b>	<b>IT Industry Research Design and Methods</b>
This course is a seminar course designed to provide an overview of academic research for I7TP students. This course covers diverse topics associated with academic research, including conceptualizing a research design, literature review, identifying variables, constructing hypotheses, data collection, instrument development, sampling, empirical analysis, etc. SPSS as a statistics analysis tool will be used to understand diverse quantitative research methods. Student will have a capability of absorbing the knowledge from diverse academic research articles and of applying the implication from the articles to the real business field.	
<b>I7P757</b>	<b>Method to Implement Information(e-Government) Project</b>
The first part of the course will teach the theories and concepts, and new trends which required for implementing e-gov projects, and in the second part, students will learn project planning, making RFP, auditing, performance management, and etc. through a workshop.	
<b>I7P800</b>	<b>Special Topics in Global IT (Management)</b>
Covering the knowledge related to the policy establishment and the management of the IT technology needed for the developing country government officers. Course will be lectured by the industry experts and the students will prepare country report on the topic. Topics will be changed flexibly.	
<b>Elective Major Courses (Liberal Arts Field)</b>	

<b>ITP500</b>	<b>Korean Conversation</b>
This course is designed for students who have no previous exposure to Korean language. The main objective of the course is to help students to cope with general or emergency situations through practicing basic survival expressions. The emphasis will be on mastery of 150 basic sentences prepared by ITP.	
<b>ITP505</b>	<b>Korean Reading</b>
This course will help students build basic Korean sentence reading skills. Students will learn how to use a Korean dictionary for understanding simple sentences and how to comprehend Korean reading material needed for their majors.	
<b>ITP510</b>	<b>Korean Grammar</b>
This course is designed for students to learn the constituents of a Korean sentence. Studying each component of a sentence will help students to improve their Korean speaking, reading, and writing skills. This course will focus on the methodology of understanding and learning Korean language within a short period of time. Functions and usages of subject, predicate, object, negative sentence, number, interrogative, imperative mood, etc. will be discussed.	
<b>ITP511</b>	<b>Intermediate Korean</b>
This course is intended to educate students to read and understand articles or textbooks about Korean culture and history. The main objective of the course is to improve students' reading ability by utilizing Korean newspapers and magazines as class reading materials. Advanced reading skills including how to look up words in a dictionary and how to utilize a dictionary are also covered.	
<b>ITP512</b>	<b>Intermediate Korean II</b>
This course is designed for students to learn Korean conversation skills needed to acquire specialized knowledge. Students learn and practice upper-intermediate level Korean conversation in order to have a good command of IT learning and questions.	
<b>ITP515</b>	<b>Advanced Korean</b>
This course is purposed to help foreign students acquire advanced Korean, especially focusing on IT-related research papers reading and practical discussion.	
<b>ITP525</b>	<b>Advanced English Conversation and Presentation Skills</b>
This course will focus on further improving students' conversational skills in an academic setting and developing presentation skills. Theoretical and practical considerations will be discussed and developed in class to assist students in groups and individually prepare, develop and present a series of in-class presentations. Particular emphasis will be placed on assisting students develop skills directly relevant to their concurrent academic work. Classes will discuss and practice pronunciation, posture, styles of presentations, eye contact, audience interaction, intonation, anxiety control, the use of graphics, Power Point issues, transitions, etc. Techniques and materials used by Toastmasters might also be incorporated into the class and students might concurrently attend Toastmaster presentations and programs.	
<b>ITP540</b>	<b>Korean Culture and History I</b>
The purpose of this course is to introduce Korean history and culture from Gojoseon to Joseon Dynasty. Historical backgrounds of Korea are discussed to encourage students to have various points of view and to promote them to have Korean-friendly minds. Information about Korean historical figures and philosophy are also introduced. Foundation of Korean IT industry is reviewed by tracing Korean history.	
<b>ITP541</b>	<b>Korean Culture and History II</b>
This course is designed for students to learn Korean spirits which have significantly leapt since 1945, the year in which Korea was liberated from Japan. Korea's economy and industry, which were swiftly recovered from the destruction caused by the Korean War, will be investigated and discussed in connection with industrial tours provided by the course. Students are required to make a presentation on Saema-eul Movement, recovery from IMF and other cultural sectors including sports. The development of city culture centered around 8 major cities in Korea will be also reviewed.	
<b>ITP550</b> ~	<b>Taekwondo I, II, III, IV, V</b>

<b>ITP554</b>	
<p>his course is aimed at delivering Taekwondo spirits such as humanitarianism, pacifism, integrity, and responsibility so that students can understand Korean traditional culture and can cultivate Korean spirits. The course will give a systematic lessons, dividing Taekwondo performances into three parts --Basics, Poomsae, Fighting-- to provide students with opportunities to advance to the next higher level and to the highest level. It is based on Korea's traditional martial arts and offers the understandings of Korea's spiritual culture. Furture, students can learn excellency of Teakwondo and build a state of "A sound mind in a sound body."</p>	
<b>Research</b>	
<b>ITP960</b>	<b>Research for M.S. Thesis</b>
<p>Basis of the thesis plan authorized by advisor and though the individual study and experiments, Master dissertation will be written.</p>	
<b>ITP965</b>	<b>Individual Study (for M.S. Non-Thesis)</b>
<p>One of the graduation requirement of the Non-Thesis Master. With the advisor's guidance and instruct, Country Report will be written through out the semester</p>	
<b>ITP980</b>	<b>Research for Ph.D. Dissertation</b>
<p>Basis of the thesis plan authorized by advisor and though the individual study and experiments, Ph.D dissertation will be written.</p>	
<b>ITP966</b>	<b>M.S. Seminar</b>
<p>Seminars which belong to Research Course will be held by famous speakers invited from IT companies, government or research institutes to share and learn the ICT technology and the case studies.</p>	
<b>ITP986</b>	<b>Ph.D. Seminar</b>
<p>Seminars which belong to Research Course will be held by famous speakers invited from IT companies, government or research institutes to share and learn the ICT technology and the case studies.</p>	