

Course Descriptions

ITP610 Introduction to the Latest IT Technology R&D in Korea 3:0:3
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.

ITP620 Introduction to IT Technology Management/Policy in Korea 3:0:3
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.

ITP700 Wireless Communications in Korea 3:0:3
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.

ITP701 Ubiquitous Computing in Korea 3:0:3
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.

ITP702 Software Engineering in Korea 3:0:3
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.

ITP703 BcN Technology in Korea 3:0:3
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

ITP705 Research Design and Methods for Engineers 3:0:3
This course is a seminar course designed to provide an overview of academic research for ITTP 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.

ITP750 ICT Economics and Management) 3:0:3
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.

ITP751 Internet Business and Management 3:0:3
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.

ITP753 IT Technology Management and Policy

3:0:3

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 ITTP 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.

ITP752 Financial & Accounting Management in IT Industry

3:0:3

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

ITP755 Digital Convergence Strategy

3:0:3

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.

ITP756 IT Industry Research Design and Methods

3:0:3

This course is a seminar course designed to provide an overview of academic research for ITTP 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.

ITP500 Korean Speaking I

3:0:1

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 ITTP.

ITP501 Korean Speaking II

3:0:1

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.

ITP505 Korean Reading I

3:0:1

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.

ITP506 Korean Reading II

3:0:1

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.

ITP510 Korean Grammar

3:0:1

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.

ITP515 Korean Advanced Reading I

3:0:1

Students will learn how to read IT-related newspaper articles or short editorials. The goal of this course is to help students improve their reading skills and catch up with Korea's latest IT information by reading articles in Korean newspapers such as Electronic Times.

ITP516 Korean Advanced Reading II

3:0:1

This course will focus on reading articles from various media sources in order for students to have a better understanding about Korea. It also encourages students to read Korean articles or books related to IT technology and economics management.

ITP555 Korean Technical Reading I

3:0:1

This course is intended for foreign students in a doctorate program. The main objective of the course is to help students learn how to effectively find and read research papers related to topics of their interests. The course also will help students apply their knowledge that they acquire from the information and articles related to Korea's advanced IT to their own research. The emphasis will be on development of technical skills needed for understanding Korean sentences, on improvement of students' ability to find research topics and to read related reading materials, and on improvement of students' speaking ability through discussion sessions in Korean.

ITP556 Korean Technical Reading II

3:0:1

The purpose of this course is to assist foreign students in a doctorate program to acquire advanced-level of Korean, especially focusing on reading IT-related research papers and on actual discussion. The course will help foreign students to write their own papers with quality through searching, reading, and understanding well-established IT-related research papers. Discussion in Korean is also conducted to enhance students' comprehensive thinking power.

ITP540 Korean Culture and History I

2:0:1

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.

ITP541 Korean Culture and History II

2:0:1

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 Saemaeul 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.

ITP542 Korean Culture and History III

2:0:1

This course will be conducted to enhance students' understanding of Korean culture and history, which was accumulated from Korean Culture and History I and II. Students are required to plan field trips individually or in

groups to Korean historical sites such as Gyeongju National Museum or Buyeo National Museum. To help students understand scholarly spirits and artistry of Korea, the course will provide them with opportunities to listen to Korean traditional music and folk songs; to learn to play Korean traditional musical instruments such as Janggu, Samulnori, and Short bamboo flute; to learn Korean calligraphy. Traditional Korean masked dance lessons will be given to students for a better understanding of Korean community.

ITP550 Taekwondo I 2:0:1

This 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.

ITP551 Taekwondo II 2:0:1

ITP552 Taekwondo III 2:0:1

ITP553 Taekwondo IV 2:0:1

ITP554 Taekwondo V 2:0:1

ITP520 Intermediate English Conversation and Writing 3:0:1

This course seeks to assist students in developing conversation and writing skills necessary to successfully function in the classroom with English as the medium of instruction. The conversational component of the course will introduce students to a range of conversational situations which they will explore through role plays, pronunciation activities and grammatical exercises. The writing component will seek to broaden their grammatical and lexical range and to improve paragraph cohesion. Students will be introduced to writing argumentative essays, comparison and contrast essays as well as writing descriptions of statistical data.

ITP525 Advanced English Conversation and Presentational Skills 3:0:1

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.

ITP530 Advanced English Writing 3:0:1

This course will provide students with a range of advanced academic and business writing skills. The mechanics of writing such as capitalization, punctuation, the use of prepositions, articles and transitional expressions will be reviewed and consolidated during the first weeks of the course. Students will learn how to write thesis statements, how to recognize the appropriateness of different levels of formality in writing, academic and business writing styles, how to write definitions, how to write business correspondence, memos and email and how to write academic summaries and critiques. This course will require students to write weekly summaries and assignments which will be edited by their peers and subsequently by the instructor thereby providing students with continuing feedback on their progress.

ITP921 Seminar 2:0:1

The objective of this course is not only to learn about the status of Korea's latest IT technology but also to build human network with Korean IT experts. Famous speakers actively engaging in the IT field are invited from the Korean government, IT companies or universities to deliver their 'on the spot' experiences and knowledge to the students.

ITP911 Internship for MS

The purpose of this course is to provide students with opportunities to be able to work for the top IT research institute of Korea, ETRI, as an intern and build a strong network with them for future industrial/international

collaborations. Each student is assigned one team leader as his/her advisor and one researcher as a mentor. For 8 weeks, they conduct research of their interest field with ETRI researchers and hold a seminar every 2 weeks to share and discuss research results. Internship Planning Report should be submitted within one week, Internship Progress Report after 4 weeks, and finally Internship Final Report upon the completion of the internship. Each team leader will evaluate students' performance and submits the evaluation result to ITTP.

ITP912 Internship for PhD

ITP930 Country Report for Non-thesis

ITP931 Research for Thesis

ITP932 Research for Ph.D Dissertation