

글로벌IT기술대학원프로그램 학사요람 (2022)

Course Completion Requirements

Major Course Completion Requirements for Global IT Technology Program (ITTP) (For Master's Program)

Thesis Mater's Degree Program

Please check the common graduation requirements.

■ Credit Requirement for Graduation:

Required to complete a total of more than 47 credits

■ Mandatory General Courses: 3 credits & 1AU

- Scientific Writing(3 credits), Ethics and Safety(1AU)

■ Mandatory Major Courses: 6 credits

○ ITP610 Introduction to the Latest IT Technology R&D in Korea

○ ITP620 Introduction to IT Technology Management/Policy in Korea

■ Electives Courses: 26 credits

○ Major course : 18 credits

○ Interdisciplinary : 6 credits

※ Interdisciplinary courses for those who major in management: ITP700, ITP701, ITP702, ITP703, ITP705, ITP810 and KAIST regular course from designated departments; Dept. of Electrical Engineering, Dept. of Computer Science, Dept. of Industrial & Systems Engineering, Dept. of Knowledge Service Engineering.

※ Interdisciplinary courses for those who major in engineering: IP750, ITP751, ITP752, ITP753, ITP755, ITP756, ITP757, ITP800 and KAIST regular courses from designated departments; Dept. of Business and Technology Management, Graduate School of Innovation and Technology management(Courses of Technology are not included.)

※ Other Interdisciplinary courses in main campus are must be accepted by ITTP director's approval

○ Liberal Arts Field: More than 8 credits of Liberal Arts Field courses offered by ITTP.

■ Research Courses: 12 credits

○ More than 9 credits of Research of M.S.

○ 3 credits of Seminar is mandatory.

■ English Requirements for Graduation

○ [TOEIC 720](#), [TOEFL\(IBT\) 83](#), [IELTS 6.5](#), [TEPS 599](#), [New TEPS 326](#) ↑

○ For those who have the score TOEIC 700~719, TOEFL(IBT) 82, they are considered meeting the English requirements for graduation if they take one English course, which get grade at least B+ offered by ITTP or Department of Humanities and Technology Management (Scientific Writing, CC500 (mandatory general course) is not included.)

Coursework Master's Degree Program
Please check the common graduation requirements.
<p><input checked="" type="checkbox"/> Credit Requirement for Graduation: Required to complete a total of more than 47 credits</p> <p><input checked="" type="checkbox"/> Mandatory General Courses: 3 credits & 1AU - Scientific Writing(3 credits), Ethics and Safety(1AU)</p> <p><input checked="" type="checkbox"/> Mandatory Major Courses: 6 credits <input type="radio"/> ITP610 Introduction to the Latest IT Technology R&D in Korea <input type="radio"/> ITP620 Introduction to IT Technology Management/Policy in Korea</p> <p><input checked="" type="checkbox"/> Electives Courses: 26 credits <input type="radio"/> Major course : 18 credits <input type="radio"/> Interdisciplinary : 6 credits</p> <p>※ Interdisciplinary courses for those who major in management: ITP700, ITP701, ITP702, ITP703, ITP705, ITP810 and KAIST regular course from designated departments; Dept. of Electrical Engineering, Dept. of Computer Science, Dept. of Industrial & Systems Engineering, Dept. of Knowledge Service Engineering.</p> <p>※ Interdisciplinary courses for those who major in engineering: IP750, ITP751, ITP752, ITP753, ITP755, ITP756, ITP757, ITP800 and KAIST regular courses from designated departments; Dept. of Business and Technology Management, Graduate School of Innovation and Technology management(Courses of Technology are not included.)</p> <p>※ Other Interdisciplinary courses in main campus must be accepted by ITTP director's approval <input type="radio"/> Liberal Arts Field: More than 8 credits of Liberal Arts Field courses offered by ITTP.</p> <p><input checked="" type="checkbox"/> Research Courses: 9 credits <input type="radio"/> More than 6 credits of Individual Study <input type="radio"/> 3 credits of Seminar is mandatory.</p> <p><input checked="" type="checkbox"/> English Requirements for Graduation <input type="radio"/> TOEIC 720, TOEFL(IBT) 83, IELTS 6.5, TEPS 599, New TEPS 326 ↑ <input type="radio"/> For those who have the score TOEIC 700~719, TOEFL(IBT) 82, they are considered meeting the English requirements for graduation if they take one English course, which get grade at least B+ offered by ITTP or Department of Humanities and Technology Management (Scientific Writing, CC500 (mandatory general course) is not included.)</p> <p><input type="checkbox"/> Transitional Measures - Graduation requirement is applied to the 2018 fall enrolled students. - Students enrolled before 2018 spring must be contented 2018 graduation requirements or former requirements.</p>

Major Course Completion Requirements for Global IT Technology Program (ITTP) (For Doctoral Program)
Please check the common graduation requirements.
<p><input checked="" type="checkbox"/> Credit Requirement for Graduation: Required to complete a total of more than 77 credits</p> <p><input checked="" type="checkbox"/> Mandatory General Courses: 3 credits & 1AU - Scientific Writing(3 credits), Ethics and Safety(1AU)</p> <p><input checked="" type="checkbox"/> Mandatory Major Courses: 6 credits <input type="radio"/> ITP610 Introduction to the Latest IT Technology R&D in Korea <input type="radio"/> ITP620 Introduction to IT Technology Management/Policy in Korea</p> <p><input checked="" type="checkbox"/> Electives Courses: 32 credits <input type="radio"/> Major course : 18 credits <input type="radio"/> Interdisciplinary : 6 credits</p> <p>※ Interdisciplinary courses for those who major in management: ITP700, ITP701, ITP702, ITP703, ITP705, ITP810 and KAIST regular course from designated departments; Dept. of Electrical Engineering, Dept. of Computer Science, Dept. of Industrial & Systems Engineering, Dept. of Knowledge Service Engineering.</p> <p>※ Interdisciplinary courses for those who major in engineering: IP750, ITP751, ITP752, ITP753, ITP755, ITP756, ITP757, ITP800 and KAIST regular courses from designated departments; Dept. of Business and Technology Management, Graduate School of Innovation and Technology management(Courses of Technology are not included.)</p> <p>※ Other Interdisciplinary courses in main campus are must be accepted by ITTP director's approval <input type="radio"/> <input type="radio"/> Liberal Arts Field: More than 8 credits of Liberal Arts Field courses offered by ITTP.</p> <p><input checked="" type="checkbox"/> Research Courses: Research : 36 credits <input type="radio"/> More than 32 credits of Research for thesis. <input type="radio"/> 4 credits of Seminar is mandatory.</p> <p><input checked="" type="checkbox"/> English Requirements for Graduation <input type="radio"/> TOEIC 720, TOEFL(IBT) 83, IELTS 6.5, TEPS 599, New TEPS 326 ↑ <input type="radio"/> For those who have the score TOEIC 700~719, TOEFL(IBT) 82, they are considered meeting the English requirements for graduation if they take one English course, which get grade at least B+ offered by ITTP or Department of Humanities and Technology Management (Scientific Writing, CC500 (mandatory general course) is not included.)</p> <p><input type="checkbox"/> Transitional Measures - Graduation requirement is applied to the 2018 fall enrolled students. - Students enrolled before 2018 spring must be contented 2018 graduation requirements or former requirements.</p>

Table of Curriculum

Classification	Course No.	Computer Code	Course Name	Lecture:Lab:Credit (Assignment)	Semester	Note
Mandatory General	CC020	11.020	Ethics and Safety I	3:0:3	Spring/Fall	
	CC500	11.500	Scientific Writing	3:0:3	Spring/Fall	
Major Requirements	ITP610	29.610	Introduction to the Latest IT Technology R&D in Korea	3:0:3	Spring/Fall	
	ITP620	29.620	Introduction to IT Technology Management/Policy in Korea	3:0:3	Spring/Fall	
Elective Major Courses	Engineering Major Field	ITP702	29.702	Software Engineering in Korea	3:0:3	Spring/Fall
		ITP705	29.705	Research Design and Methods for Engineers	3:0:3	Spring/Fall
		ITP810	29.810	Special Topics in Global IT (Engineering)	3:0:3	Spring/Fall
	Management Major Field	ITP750	29.750	ICT Economics and Management	3:0:3	Spring/Fall
		ITP751	29.751	Internet Business and Management	3:0:3	Spring/Fall
		ITP752	29.752	Financial and Accounting Management in IT Industry	3:0:3	Spring/Fall
		ITP753	29.753	IT Technology Management and Policy	3:0:3	Spring/Fall
		ITP755	29.755	Digital Convergence Strategy	3:0:3	Spring/Fall
		ITP756	29.756	IT Industry Research Design and Methods	3:0:3	Spring/Fall
	Liberal Arts Field	ITP800	29.800	Special Topics in Global IT (Management)	3:0:3	Spring/Fall
		ITP500	29.500	Korean Conversation	3:0:1	Spring/Fall
		ITP505	29.505	Korean Reading	3:0:1	Spring/Fall
		ITP510	29.510	Korean Grammar	3:0:1	Spring/Fall
		ITP511	29.511	Intermediate Korean	3:0:1	Spring/Fall
		ITP512	29.512	Intermediate Korean II	3:0:1	Spring/Fall
		ITP515	29.515	Advanced Korean	3:0:1	Spring/Fall
		ITP525	29.525	Advanced English Conversation and Presentation Skills	3:0:1	Spring/Fall
		ITP540	29.540	Korean Culture and History I	2:0:1	Spring/Fall
		ITP541	29.541	Korean Culture and History II	2:0:1	Spring/Fall
		ITP550	29.550	Taekwondo I	2:0:1	Spring/Fall
ITP551	29.551	Taekwondo II	2:0:1	Spring/Fall		
ITP552	29.552	Taekwondo III	2:0:1	Spring/Fall		
ITP553	29.553	Taekwondo IV	2:0:1	Spring/Fall		
ITP554	29.554	Taekwondo V	2:0:1	Spring/Fall		
Research	ITP960	29.960	Research for M.S. Thesis	0:0:0	Spring/Fall	
	ITP965	29.965	Individual Study (for M.S. Non-Thesis)	0:0:0	Spring/Fall	
	ITP980	29.980	Research for Ph.D. Dissertation	0:0:0	Spring/Fall	
	ITP966	29.966	M.S. Seminar	2:0:1	Spring/Fall	
	ITP986	29.986	Ph.D. Seminar	2:0:1	Spring/Fall	

※ Course classification, course title, and mutual recognition of credits may differ according to the effective year of the requirements.

Outline of Curriculum

■ Master & Ph.D. Program

Major Requirements	
ITP610	Introduction to the Latest IT Technology R&D in Korea
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
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.	
Elective Major Courses (Engineering Major Field)	
ITP702	Software Engineering in Korea
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.	
ITP705	Research Design and Methods for Engineers
This course is a seminar course designed to provide an overview of academic research for ITP 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.	
ITP810	Special Topics in Global IT (Engineering)
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.	
Elective Major Courses (Management Major Field)	
ITP750	ICT Economics and Management
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
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.	
ITP752	Financial and Accounting Management in IT Industry
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	

<p>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</p>	
ITP753	IT Technology Management and Policy
<p>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 ITPP 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.</p>	
ITP755	Digital Convergence Strategy
<p>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.</p>	
ITP756	IT Industry Research Design and Methods
<p>This course is a seminar course designed to provide an overview of academic research for ITPP 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.</p>	
ITP800	Special Topics in Global IT (Management)
<p>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.</p>	
Elective Major Courses (Liberal Arts Field)	
ITP500	Korean Conversation
<p>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 ITPP.</p>	
ITP505	Korean Reading
<p>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.</p>	
ITP510	Korean Grammar
<p>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.</p>	

ITP511	Intermediate Korean
<p>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.</p>	
ITP512	Intermediate Korean II
<p>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.</p>	
ITP515	Advanced Korean
<p>This course is purposed to help foreign students acquire advanced Korean, especially focusing on IT-related research papers reading and practical discussion.</p>	
ITP525	Advanced English Conversation and Presentation Skills
<p>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.</p>	
ITP540	Korean Culture and History I
<p>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.</p>	
ITP541	Korean Culture and History II
<p>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.</p>	
ITP550 ~ ITP554	Taekwondo I, II, III, IV, V
<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>	
Research	
ITP960	Research for M.S. Thesis
<p>Basis of the thesis plan authorized by advisor and though the individual study and experiments, Master dissertation will be written.</p>	

ITP965	Individual Study (for M.S. Non-Thesis)
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	
ITP980	Research for Ph.D. Dissertation
Basis of the thesis plan authorized by advisor and though the individual study and experiments, Ph.D dissertation will be written.	
ITP966	M.S. Seminar
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.	
ITP986	Ph.D. Seminar
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.	

Outline of Program

<h1>Global Information and Telecommunication Technology Program</h1>	ITTP Homepage: http://ittp.kaist.ac.kr/html/kr/
	ITTP Office: A004, 005, 10 th Floor, Administrative B/D , Munji Campus, KAIST
<p>■ Overview</p> <p>The Korean Government Ministry of Science and ICT the Global IT Technology Program(ITTP). The Global IT Technology Program aims to enhance Korea's reputation for excellence in ICT related international education through the continued internationalisation of the education, training and research sectors for government officials, researchers of national institutions and national universities on ICT sector.</p> <p>The objectives of the ITTP are to contribute to the implementation of Government policy priorities, by increasing international research and education engagement between Korea and priority countries in key fields of ICT, research and innovation. The ITTP offers achieving individuals from Korea and overseas the opportunity to develop their knowledge and expertise and build institution-to-institution connections and create the next generation of global ICT leaders across a wide variety of professional ICT fields.</p>	
<p>■ Academic and Research Activity</p> <ul style="list-style-type: none"> - Provide customized training curricula for government officials, researchers of national institutions and national universities on ICT sector. (Information communication technology and policy training) - Development and establishment of specialized courses and technical business details and conference to promote international collaboration - Developing practical problem-solving skills through industry-academic cooperation activities with Korean ICT companies and institutions 	

Introduction of Program

Introduction of Academic Degree Program

▣ Academic Degree Program

ITTP offers a customized master's and doctoral degree program for government officials, employees of public institutions or senior-level researchers at national research centers working in the IT fields of emerging countries. With optimum curriculum for international collaboration and technology commercialization, ITTP cultivates people of talent retained with professionalism in enterprise performance.

After admission, students chose the major (management / engineering) based on their interest and wish. For doctoral program, advisor will be assigned and for masters' program, director of ITTP will help students in academic and overall campus life in KAIST. In addition, students are encouraged to focus on their research activities, participate international conferences at Korea and abroad to lay one's achievements to the academic world.

○ Master's Program

- Throughout 4 semesters, students should successfully complete 47 credits of coursework to fulfill the graduation requirement.
- ITTP offers Thesis-Master & Coursework (Non-thesis) Master
- For Thesis-Master, students will be assigned an advisor and placed in KAIST lab. As an achievement of intensive and creative research activities, students are asked to submit Master's dissertation as an graduation requirement.
- For Coursework Master, Director of ITTP will be assigned as an advisor and will be placed in ITTP Lab. Students will participate in regular lab meeting and seminar to develop ideas needed in their country. As an achievement of the research, students are asked to present and submit Country Report as an graduation requirement.

○ Doctoral Program

- Throughout 6 semesters, students should successfully complete 77 credits of coursework to fulfill the graduation requirement.
- Students must pass Qualifying Examination within 3rd semester,
- For Ph.D, students will be assigned an advisor and placed in KAIST lab. As an achievement of intensive and creative research activities, students are asked to submit Doctoral dissertation as an graduation requirement.
- Publication Requirement: International or demestic Journal other than SCI/SSCI, publication is necessary; SCI/SSCI level journal, submission is necessary.