

## Curriculum

### □ Undergraduate(General Course)

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Mandatory English Courses	COM401	Listening IV	3:0:1	Spring	
	COM402	Conversation IV	3:0:1	Spring	
	COM403	Reading IV	3:0:1	Spring	
	COM404	Writing IV	3:0:1	Spring	
	COM405	Listening V	3:0:1	Fall	
	COM406	Conversation V	3:0:1	Fall	
	COM407	Reading V	3:0:1	Spring,Fall	
	COM408	Writing V	3:0:1	Spring,Fall	
	COM409	English Communication	3:0:1	Spring	
Mandatory General Courses	COM120	The Art of Technical Writing	2:0:1	Spring	
	COM171	Colloquium	1:0:1	Fall	
	COM172	Colloquium	1:0:1	Fall	
	COM173	Colloquium	1:0:1	Fall	
	COM200	University Hour	0:0:0	Fall	
	HSS070	Ethics and Safety II	1AU	Spring,Fall	
Elective General Courses	COM125	Chinese I	2:0:2	Spring	
	COM126	Chinese II	2:0:2	Fall	
	COM127	Spanish	2:0:2	Summer	
	COM128	Spanish II	2:0:2	Fall	
	COM130	Korean History	2:0:2	Spring	
	COM131	Modern World History	2:0:2	Spring	
	COM132	Oriental Philosophy	2:0:2	Spring	
	COM133	Western Philosophy	2:0:2	Spring	
	COM134	Appreciating Operas	2:0:2	Fall	
	COM135	Visual history on European Culture	2:0:2	Fall	
	COM141	Understanding Music	2:0:2	Spring	
	COM142	Understanding Arts	2:0:2	Fall	
	COM143	Literature and Society	2:0:2	Fall	
	COM144	Fashion and Clothing	2:0:2	Fall	
	COM145	Invitation to British and American Literature	2:0:2	Fall	
	COM146	Food Habits and Diet	2:0:2	Fall	
	COM147	Global Leadership	2:0:2	Spring,Fall	
	COM150	Physical Education (I)(Golf)	2:0:1	Spring,Fall	
	COM151	Physical Education (II)(Swimming)	1:0:1	Spring	
	COM152	Physical Education (III)(Skiing)	2:0:1	Fall	

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Elective General Courses	COM153	Physical Education (IV)(Rock Climbing)	2:0:1	Fall	
	COM155	Physical Education (VI)(Squash)	2:0:1	Spring,Fall	
	COM156	Physical Education (VII) Sports Dance	2:0:1	Fall	
	COM157	Physical Education (VIII)Tennis	2:0:1	Fall	
	COM160	Introduction to Sociology	2:0:2	Fall	
	COM161	Introduction to Psychology	2:0:2	Fall	
	COM162	Introduction to Communications	2:0:2	Fall	
	COM164	Science and Technology	2:0:2	Spring	
	COM165	Myths in Literature	2:0:2	Spring	
	COM166	Violin Practice	2:0:1	Spring	
	COM167	Piano Classic	2:0:2	Spring	
	COM168	Psychology of Relationship between Man and Woman	2:0:2	Fall	
	COM169	Creativity and Morals for Intellectuals	2:0:2	Fall	
	COM170	Dessinand Watercolor Painting	2:0:1	Spring	
	COM180	Oriental Classics	2:0:2	Fall	
	COM181	Occidental Classics	2:0:2	Fall	
	COM182	Movie and Society	2:0:2	Fall	
	COM183	Special Lecture on Social Sciences	3:0:3	Spring	
	COM184	Topics in Science and Technology	3:0:3	Spring	
	COM185	Peer Group Seminar	2:0:1	Spring	
COM190	Violin Practice II	0:2:1	Spring		
COM300	Social service	2:0:1	Spring		

□ Undergraduate(Major Course)

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Mandatory Common	ICE100	Calculus I	3:0:3	Spring	
	ICE102	Numerical Linear Algebra	3:0:3	Summer	
	ICE103	Probability and Statistics	3:0:3	Summer	
	ICE107	Differential Equation	3:0:3	Spring	
	ICE111	Chemistry	3:0:3	Spring,Fall	
	ICE112	Life Science	3:0:3	Spring,Fall	
	ICE113	Discrete Mathematics I	3:0:3	Fall	
	ICE114	Calculus II	3:0:3	Fall	
	ICE115	Physics I	3:0:3	Spring	
	ICE116	Physics II	3:0:3	Fall	
	ICE120	Introduction to Computer Science	3:0:3	Spring	
Elective Common	ICE109	Applied Analysis	3:0:3	Spring,Fall	
Mandatory Major	ICC210	Algorithm Design & Analysis	3:0:3	Summer,Fall	
	ICC220	Computer Architecture	3:0:3	Spring,Fall	
	ICC225	Operating Systems	3:0:3	Spring,Fall	
	ICC341	Programming Languages and Lab	3:2:4	Spring,Fall	
	ICE124	Programming Fundamentals I(JAVA)	3:0:3	Spring,Summer	
	ICE125	Programming Fundamentals II(C,C++)	3:0:3	Fall	
	ICE200	Data Structure	3:0:3	Spring,Fall	
	ICE202	Software Studio	2:4:3	Spring,Fall	
	ICE211	Signal and System	3:0:3	Spring	
	ICE231	Introduction to Telecommunication System	3:0:3	Summer	
	ICE241	Circuit Theory	3:0:3	Spring	
	ICE243	Digital Logic Design+Lab	3:4:4	Spring,Fall	
	ICE244	Electromagnetics	3:0:3	Spring,Fall	
	ICE310	Digital Filtering	3:0:3	Fall	
	Elective Major	ICC201	Abstract Algebra	3:0:3	Fall
ICC212		Introduction to Information Security	3:0:3	Summer	
ICC222		Microprocessor+Lab	3:2:4	Fall	
ICC230		Computer Networks	3:0:3	Spring,Fall	
ICC235		Multimedia System	3:0:3	Spring	
ICC250		Human-Computer Interaction	3:0:3	Spring,Summer	
ICC255		Computer Graphics	3:0:3	Fall	
ICC270		Database	3:0:3	Spring,Fall	
ICC293		Introduction to Software Engineering	3:0:3	Spring	
ICC300		Wireless and Mobile Internet	3:0:3	Spring	
ICC301		Artificial Intelligence	3:0:3	Spring	
ICC311		Automata and Computational Theory	3:0:3	Spring	
ICC330		Networked Computing	3:0:3	Spring,Fall	
ICC338		Programming for WWW	3:0:3	Summer	
ICC339		Multimedia Communication Middleware	3:0:3	Summer,Fall	
ICC340		Compiler Construction	3:0:3	Spring	
ICC350		Introduction to Biomedical Engineering	3:0:3	Spring	
ICC355	Computer Animation	2:2:3	Fall		

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Elective Major	ICC380	Biochemistry	3:0:3	Fall	
	ICC382	Molecular Genetics	3:0:3	Spring,Fall	
	ICC402	Problem Solving	3:0:3	Summer	
	ICC403	Data & Text Mining	3:0:3	Fall	
	ICC404	Embedded Processor Design	3:0:3	Spring	
	ICC480	Bioinformatics	3:0:3	Summer,Fall	
	ICC482	Experimental Methods in BT+Lab	3:4:4	Spring	
	ICE245	Electronic Circuit (I)+Lab	3:2:4	Fall	
	ICE251	Modern Physics	3:0:3	Fall	
	ICE312	Introduction to Multimedia+Lab	2:2:3	Fall	
	ICE323	IPTV Technology	3:0:3	Fall	ECE
	ICE324	Audio&Speech Coding Theory and Convergence	3:0:3	Fall	ECE
	ICE331	Digital Communication Theory	3:0:3	Spring	
	ICE341	Electromagnetic Wave	3:0:3	Spring,Summer,Fall	
	ICE342	Microprocessor+Lab	3:2:4	Fall	
	ICE343	Electronic Circuit (II)+Lab	3:2:4	Spring	
	ICE350	EmbeddedProgrammingforMultimedia Broadcasting + Lab	1:2:3	Spring	
	ICE351	Solid State Electronics	3:0:3	Spring	
	ICE352	Broadcasting Engineering	3:0:3	Spring	
	ICE361	Introduction to SoC	3:0:3	Fall	
	ICE362	Quantum Electronics	3:0:3	Summer	
	ICE411	Introduction to Video Engineering	3:0:3	Spring	
	ICE412	Introduction to Speech Engineering	3:0:3	Fall	
	ICE421	Introduction to Network	3:0:3	Spring	
	ICE422	Network Protocol+Lab	3:2:4	Fall	
	ICE431	Wireless Communication+Lab	3:2:4	Fall	
	ICE440	Digital Color Processing	3:0:3	Fall	ECE
	ICE441	Radio Electronics + Lab	3:2:4	Fall	
	ICE451	Laser Electronics	3:0:3	Summer	
	ICE452	Optical Communication System	3:0:3	Fall	
ICE465	Digital Radio	3:0:3	Summer		
ICE466	Numerical Methods for Engineers	3:0:3	Summer,Fall		
Mandatory Research Courses	ICC495	Independent study for Undergraduate project (A)		Spring,Summer,Fall	CSE
	ICC496	Independent study for Undergraduate project (B)		Spring,Summer,Fall	CSE
	ICC497	Undergraduate Project		Spring,Summer,Fall	CSE
	ICC498	Internship Research for Bachelor		Spring,Summer,Fall	CSE
	ICE495	Independent study for undergraduate project (A)		Spring,Summer,Fall	ECE
	ICE496	Independent study for undergraduate project (B)		Spring,Summer,Fall	ECE
	ICE497	Undergraduate Project		Spring,Summer,Fall	ECE
	ICE498	Internship Research for Bachelor		Spring,Summer,Fall	ECE

❑ Master and Doctoral Programs

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Common	COM501	Korean Beginning I	3:0:2	Spring,Summer,Fall	
	COM502	Korean Beginning II	3:0:2	Spring,Summer,Fall	
	COM503	Korean Intermediate	3:0:2	Summer,Fall	
	COM505	English Thesis & Technical Writing	2:0:1	Spring,Fall	
	CC020	Ethics and Safety I	IAU	Spring,Fall	
Major	ICE502	Computer Architecture	3:0:3	Summer	
	ICE503	Operating Systems	3:0:3	Spring	
	ICE504	Probability & Random process	3:0:3	Spring	
	ICE505	Digital Signal Processing	3:0:3	Spring,Fall	
	ICE506	Digital Communication Theory	3:0:3	Spring	
	ICE507	Telecommunication Network Engineering	3:0:3	Spring,Fall	
	ICE508	Numerical Methods for Engineers	3:0:3	Summer,Fall	
	ICE509	Electromagnetic Fields and Wave Propagation	3:0:3	Spring,Fall	
	ICE510	Semiconductor Device Physics	3:0:3	Fall	
	ICE512	Wave Optics	3:0:3	Spring	
	ICE513	Linear Systems	3:0:3	Spring	
	ICE519	Coding Theory	3:0:3	Spring	
	ICE528	Digital Switching Technology	3:0:3	Spring	
	ICE531	Wireless Communications SoC	1:4:3	Fall	
	ICE534	Web-based Software Development	3:0:3	Summer	
	ICE539	Software Engineering Economics & Management	3:0:3	Spring	
	ICE540	Bioinformatics	3:0:3	Summer,Fall	
	ICE541	Biochemistry	3:0:3	Fall	
	ICE542	Molecular Genetics	3:0:3	Spring,Fall	
	ICE543	Experimental Methods in Biotechnology and Lab	3:4:4	Spring	
	ICE545	Data & Text Mining	3:0:3	Fall	
	ICE546	Embedded Processor Design	3:0:3	Spring	
	ICE552	Computer Science for Engineers	3:0:3	Summer,Fall	
	ICE565	Introduction to acoustics	3:0:3	Fall	
	ICE573	Next Generation Display Engineering	3:0:3	Spring	
	ICE574	Introduction to Quantum Electronics	3:0:3	Summer	
	ICE577	Numerical Linear Algebra	3:0:3	Fall	
	ICE578	Estimation Theory	3:0:3	Fall	
	ICE579	Geographic Information Systems	3:0:3	Fall	
	ICE580	Multimedia Communication Middleware	3:0:3	Summer,Fall	
	ICE581	Intro. to SoC	3:0:3	Fall	
	ICE582	CMOS VLSI Design	3:0:3	Spring,Fall	
	ICE584	Introduction to Biomedical Engineering	3:0:3	Spring	
	ICE585	Introduction to Software Product Line Engineering	3:0:3	Spring	
	ICE600	Computer Network	3:0:3	Spring,Fall	
	ICE601	Distributed Systems	3:0:3	Spring	
	ICE602	Ubiquitous Networking	3:0:3	Summer	
	ICE605	Modern Cryptography	3:0:3	Spring	
	ICE606	Database Systems	3:0:3	Spring,Summer	
	ICE608	Artificial Intelligence	3:0:3	Spring,Fall	

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Major	ICE609	Computer Graphics	3:0:3	Spring	
	ICE614	Natural Language Processing	3:0:3	Summer,Fall	
	ICE615	Network Security	3:0:3	Fall	
	ICE617	Human Computer Interaction	3:0:3	Spring	
	ICE619	Advanced Digital Communication Theory	3:0:3	Fall	
	ICE623	Data Communications	3:0:3	Spring	
	ICE625	Telecommunications Network Management	3:0:3	Spring,Fall	
	ICE626	Digital Image Processing	3:0:3	Spring,Fall	
	ICE629	Speech and Audio Coding Theory	3:0:3	Fall	
	ICE630	Video Coding Theory	3:0:3	Fall	
	ICE631	Pattern Recognition Theory	3:0:3	Spring	
	ICE632	Speech Signal Processing	3:0:3	Spring	
	ICE633	Digital Video Processing	3:0:3	Fall	
	ICE634	Adaptive Signal Processing	3:0:3	0	
	ICE635	CDMA-based Communication Systems	3:0:3	Fall	
	ICE636	Mobile Communication Systems	3:0:3	Spring	
	ICE638	Optical Communications	3:0:3	Spring	
	ICE643	Optical Circuit and System Design	3:0:3	Fall	
	ICE647	RF Integrated Circuit Design	3:0:3	Fall	
	ICE649	Microwave Engineering	3:0:3	Fall	
	ICE651	MMIC Design	3:0:3	Spring,Summer	
	ICE653	Computer Haptics	3:0:3	Spring	
	ICE657	VLSI Design	3:0:3	Summer	
	ICE661	Queueing Theory	3:0:3	Fall	
	ICE664	Optical Networks	3:0:3	Spring	
	ICE667	Microwave Devices	3:0:3	Spring	
	ICE668	RF Devices	3:0:3	Summer	
	ICE669	Wireless Transceiver Design	3:0:3	Spring,Summer	
	ICE676	Analysis and Design of Antenna	3:0:3	Spring	
	ICE677	Wireless Communications SoC II	1:4:3	Spring	
	ICE679	Multimedia System	3:0:3	Summer	
	ICE681	Mixed signal circuit design	3:0:3	Fall	
	ICE683	Wireless Communication Network	3:0:3	Spring	
	ICE689	Analogue Integrated Circuits Design	3:0:3	Spring	
	ICE690	Handset L2/L3 Software	3:0:3	Fall	
	ICE695	Machine Learning	3:0:3	Summer,Fall	
	ICE696	Information Retrieval	3:0:3	Spring,Fall	
	ICE698	Modeling and Simulation	3:0:3	Fall	
	ICE702	Statistical Signal Processing	3:0:3	Spring,Fall	
	ICE711	Human Vision Modeling	3:0:3	Spring	
	ICE714	IPTV Network and Protocol	3:0:3	Spring	
ICE715	Mobile Computing	3:0:3	Summer		
ICE720	Electronic Commerce Systems	3:0:3	Summer		
ICE732	Information Theory	3:0:3	Summer,Fall		
ICE736	Design and Analysis of Broadband Network	3:0:3	Fall		

Classification	Subject No.	Subject Name	L:E:C	Semester	Remark
Major	ICE745	Optimization Techniques for Mobile Communications	3:0:3	Fall	
	ICE746	Speech Recognition System	3:0:3	Fall	
	ICE753	Software Requirements Engineering	3:0:3	Spring	
	ICE754	Software Process	3:0:3	Fall	
	ICE763	Ubiquitous Computing system	3:0:3	Spring	
	ICE764	Optimal Combining and Detection in Wireless Communications	3:0:3	Summer	
	ICE802	Special Topics on Computer Networks	3:0:3	Summer	
	ICE809	Special Topics on Artificial Intelligence	3:0:3	Fall	
	ICE812	Special Topics on Advanced Networks	3:0:3	Fall	
	ICE814	Special Topics on Multimedia Systems	3:0:3	Summer	
	ICE815	Special Topics on Image Engineering	3:0:3	Fall	
	ICE833	Special Topics on Optical Internet	3:0:3	Fall	
	ICE834	Special Topics on Microwave System	3:0:3	Spring	
	ICE839	Special Topics on Ad Hoc and Sensor Networks (I)	3:0:3	Summer	
	ICE840	Special Topics on Ad Hoc and Sensor Networks II	3:0:3	Fall	
	ICE846	Special Topics on Network Convergence	3:0:3	Summer	
	ICE847	Special Topics on Wireless Digital Processing	3:0:3	Summer	
	ICE848	Special Topics on Advanced Communication Middleware and Computing system	3:0:3	Summer	
	ICE849	WLAN MAC System Design Lab	1:3:3	Fall	
	ICE851	RFID System Design Lab.	1:3:3	Fall	
	ICE852	Special Topics on Future Networks	3:0:3	Fall	
	ICE853	Converged Optical and Wireless Access Networks	3:0:3	Fall	
	ICE854	Special Topics Communications Networks(1)	3:0:3	Fall	
	ICE855	Special Topic on Wireless Network	3:0:3	Spring	
	ICE856	A Special Topic on All-Digital PLLs	3:0:3	Spring	
	ICE857	Special Topics on Embedded Systems/Software	3:0:3	Spring	
	ICE858	Special Topics on Digital Transceiver	3:0:3	Spring	
	Interdisciplinary	ICE561	Introduction to Electrical Engineering	3:0:3	Fall
ICE570		Introduction to Computer Science	3:0:3	Spring	
ICE911		Internship Research for Master	0:0:0		
ICE912		Internship Research for Ph.D.	0:0:0		
Thesis	ICE931	Research for M.S Thesis	0:0:0		
	ICE932	Research for Ph.D.Dissertation	0:0:0		

※ ICE561 and ICE570 are Interdisciplinary subjects for IT Business students.