Course Requirements

Undergraduate Requirement

General Course		Basic Course		Major Course			Daaaaah	Total		
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Research	Total
6 (9AU)	21	27 (9AU)	23	9	32	18	29	47	4	130

Undergraduate Courses

- A. Graduation Credits : at least 130 credits in total
 - * A cumulative grade point average of 2.0 or higher out of a possible 4.3 in all coursework
- B. General Course : At least 27 credits and 9AU(applicable to students entering KAIST in 2011 and thereafter; for those who have entered KAIST in 2010 and before, refer to the Course Completion Requirements by Year of Admission)
 - Mandatory General Course
 - Students entering KAIST in 2011 and thereafter: 6 credits and 9AU

English Communication(1), Critical Thinking in English(2), Writing(3), Physical Education(4AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU), Happy College Life(1AU), Exciting College Life(1AU)

- Students entering KAIST between 2009 and 2010: 6 credits and 9AU

English Communication(1), Critical Thinking in English(2), Writing(3), Physical Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU)

- Students entering KAIST between 2007 and 2008: 7 credits and 9AU

English Communication I(1), English Communication II(1), English Reading&Writing(2), Writing(3), Physical Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU)

* English Communication I \rightarrow English Communication

English Communication II \rightarrow English Conversation

English Reading&Writing → Critical Thinking in English

- · Elective General Course in Humanities & Social Science : at least 21 credits
 - Take (6 credits) 1 course of each of the following 2 categories among 3 categories: Humanity, Society and Literature and Arts; the rest can be chosen regardless of the category. (applicable to students entering KAIST in 2009 and thereafter; for those who have entered KAIST in 2008 and before, refer to the Course Completion Requirements by Year of Admission)
 - Students entering KAIST between 2007 and 2010 should earn at least 9 credits through lectures in English among the 21 credits required as Elective General Courses in Humanities & Social Science.
 - Students having a double major take 12 credits without considering categories. (Students entering KAIST between 2007 and 2010 should take 6 credits through lectures in English.)

* The requirement of taking lectures in English as Elective General Courses in Humanities & Social Science is not applied to students entering KAIST in 2011 and thereafter.

C. Completion of Basic Courses: at least 32 credits (applicable to students entering KAIST in 2012 and thereafter; for those who have entered KAIST in 2011 and before, refer to the Course Completion Requirements by Year of Admission)

· Mandatory Basic Courses: 23 credits

- ① 1 course among Fundamental Physics I (3), General Physics I (3), and Advanced Physics I (3)
- (2) 1 course among Fundamental Physics II (3), General Physics II (3), and Advance Physics II (3)
- ③ 1 course of General Physics Lab I (1)

- ④ 1 course of Basic Biology (3) or General Biology (3)
- (5) 1 course of Calculus I (3) or Honor Calculus I (3)
- (6) 1 course of Calculus II (3) or Honor Calculus II (3)
- ⑦ 1 course among Basic Chemistry (3), General Chemistry I (3), and Advanced Chemistry (3)
- (8) 1 course of General Chemistry Lab I (1) or Advanced Chemistry Lab (1)
- (9) 1 course of Basic Programming (3) or Advanced Programming (3)
- Students having entered KAIST in 2007 or before : 23 credits (1)~9)
- Students having entered KAIST between 2008 and 2011: 26 credits((①~③), Freshman Design Course: Introduction to Design and

Communication)(3))

- Elective Basic Courses: at least 9 credits (at least two courses among Introduction to Linear Algebra, Differential Equations and Applications, and Applied Mathematical Analysis)
 - Requirements for a dual major : at least 3 credits (at least one courses among Introduction to Linear Algebra, Differential Equations and Applications, and Applied Mathematical Analysis)
- D. Major Course Requirements: at least 47 credits
 - ° Mandatory Major Courses: 18 credits
 - Introduction to electronics design Lab, Electronics Design Lab, Circuit Theory, Signals and Systems, Electromagnetics, Programming Structure for Electrical Engineering
 - · Elective Major Courses: at least 29 credits.
 - Individual Study counts up to 4 credits.
- E. Elective Course Requirements
 - from all courses in the undergraduate program.
- F. Research Course Requirements: at least 4 credits
 - B.S Thesis Research (3), Seminar(1)(Seminar is elective for foreign student)
 - * Students having a double major are exempt.
- G. English Proficiency Requirements upon Graduation
 - Before entering or during studying at KAIST, students should obtain the minimum required score or higher from one of the following: TOEFL, TOEIC, TEPS and IELTS.
 - Students who have hearing impairment level 3 or above should obtain the minimum required score or higher, excluding listening.
 - 1) Students who have submitted past scores for TOEIC (before April 2006) or TEPS (before February 28, 2007)
 - Students admitted in 2008 or later

Classification	iBT TOFEL	PBT TOFEL	CBT TOFEL	TOEIC	TEPS	IELTS
General qualification score	83	560	220	775	690	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	387	414	4.8

- Students admitted in 2007 or earlier

Classification	iBT TOFEL	PBT TOFEL	CBT TOFEL	TOEIC	TEPS	IELTS
General qualification score	83	560	220	760	670	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	380	402	4.8

 Students who have submitted NEW TOEIC score taken after May 2006 or TEPS score taken after March 1, 2007

Classification	iBT TOFEL	PBT TOFEL	CBT TOFEL	TOEIC	TEPS	IELTS
General qualification score	83	560	220	720	599	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	360	359	4.8

H. Graduation Requirements for Foreign Students: TOPIK (Test of Proficiency in Korean)

 Undergraduate foreign students are required to obtain level 2 or higher score in TOPIK before entering or during studying at KAIST.

- * Applies to students entering KAIST in 2013 and thereafter
- I. Requirements for Dual Major and Minor
 - Dual major : 40 credits including mandatory major courses
 - Minor : At least 21 credits in major courses including
 - Circuit Theory, Signals and Systems, Digital System Design, Electromagnetics, Electronic Circuits, Introduction to electronics design Lab

* General and basic courses in undergraduate program are different from years of admission; therefore, students entering KAIST in 2011 and before should refer to the Course Completion Requirements by Year of Admission.

□ Master's Program

1) Thesis Master's Degree

Mandatory General	Mandatory Major	Elective	Research	Total	
3 + 1AU	3	More than 18	More than 5	More than 33	

- A. Graduation Credits : At least 33 credits and 1 AU
- B. Mandatory General Course : 3 credits and 1AU
 - 1 course of CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics (Substitutive subject: EE528), CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC530 Enterpreneurship and Business Strategies, or CC531 Patent Analysis and Invention Disclosure, CC532 Collaborative System Design and Engineering
 - CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
 - CC020 Ethics and Safety I(1AU)
 - Mandatory general courses can not be counted as elective major cources.
- C. Mandatory Major Course : 3 credits
 - Electronics design Lab.
- D. Elective Course : At least 18 credits
 - EE509 Technical Writing (which is only given in Fall Semester) EE509 is elective for international students
 - At least 2 courses from the EE500-level or above.
 - At least 4 courses among
 - EE400-level courses designated as common course for BS and M.S.
 - xx500-level or above.

E. Research: at least 5 credits

- M.S. Thesis(at least 4 credits), Seminar(1)(Seminar is elective for foreign student)

2) Non-thesis Master's Degree

Mandatory General	Mandatory Major	Elective	Research	Total
3 + 1AU	3	More than 24	-	More than 33

- A. Graduation Credits : At least 33 credits and 1 AU
- B. Mandatory General Course : 3 credits and 1 AU(Same as Thesis Master's program requirement)
- C. Mandatory Major Course : 3 credits(Same as Thesis Master's program requirement)
- D. Elective Course : At least 24 credits
 - EE509 Technical Writing (which is only given in Fall Semester) EE509 is elective for international students
 - At least 2 courses from the EE500-level or above.
 - At least 6 courses among
 - EE400-level courses designated as common course for BS and M.S.
 - xx500-level or above.
- E. Research

- Seminar(1)(Seminar is elective for foreign student), Maximum 1 credit for Individual Study is allowed.

F. The non-thesis mater degree is offered only for students who joined to dual degree program.

Doctoral Program

Mandatory General	Mandatory Major	Elective	Research	Total
3 + 1AU	3	More than 24	More than 30	More than 60

- A. Graduation Credits : At least 60 credits and 1 AU
- B. Mandatory General Course : 3 credits and 1 AU (Same as M.S.)
- C. Mandatory Major Course : 3 credits (Same as M.S.)
- D. Elective Course : at least 24 credits
 - At least 2 courses among EE600 level or above.
 - xx500 or above.
 - Credits taken in the master's program except research and seminar credits can be accumulatively counted towards doctoral program credit. (EE400-level courses designated as common course for B.S. and M.S. are also counted.)
- E. Research Credits : at least 30 credits including Seminar(1)(Seminar is elective for foreign student)

Design course for Renaissance Program

EE512 System programming