Course Requirements

❏ **Undergraduate Requirement**

General Course			Basic Course			Major Course			Elective Course	Research	Total
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
6 (9 AU)	21	27 (9 AU)	26	6	32	18	29	47	20	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 2009 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)

　◦ Mandatory General Course

　　- Students entering KAIST in 2009 and onward : 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 → English Communication

　　　　English Communication II → English Conversation

　　　　English Reading&Writing → Critical Thinking in English

　◦ Elective General Course in Humanities & Social Science : at least 21 credits

　　- Students entering KAIST in 2009 and onward : at least 21 credits including at least 1 course in each of 2 divisions among 3 divisions(Humanity, Society, Culture & Art)

　　- Students having entered KAIST before 2009 : at least 21 credits including at least 1 course in each of of 2 divisions among 5 divisions(Science Technology; Literature and Art; History and Philosophy; Social Science; Foreign Language and Linguistics) or at least 1 course in each of of 2 divisions among 3 divisions(Humanity, Society, Literature&Art)

　　- Students entering KAIST in 2007 and onward should earn at least 18 credits through English lectures 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 in 2007 and onward should take 12 credits through English lectures.)

C. Completion of Basic Courses: at least 32 credits (applicable to students entering KAIST in 2008 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)

　◦ Mandatory Basic Courses: 26 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)

⑩ Freshman Design Course : Introduction to Design and Communication (3)

※ Students having entered KAIST in 2007 or before : 23 credits (①~⑨)

° Elective Basic Courses: at least 6 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: at least 16 credits

- from all courses in the undergraduate program.

F. Research Course Requirements: at least 4 credits

- B.S Thesis Research (3), Seminar (Seminar is elective for foreign student) (1)

※ Students having a double major are exempt.

G. English Proficiency Requirements upon Graduation

° Students are required to meet one of the following requirements on English proficiency before entering KAIST or during their years of enrollment: 560 points in PBT TOEFL; 220 points in CBT TOEFL; 83 points in IBT TOEFL; 6.5 points in IELTS; 720 points or 760/775 points in TOEIC (see below); or 599 points or 670/690 points in TEPS (see below).

※ Criteria for TOEIC and TEPS scores

- Students submitting scores from new TOEIC (held in May 2006 and onward) or TEPS held on March 1, 2007 and onward: 720 points in TOEIC; or 599 points in TEPS

- Students submitting scores from old TOEIC (held before April 2006) or TEPS held before February 28, 2007:

▫ Students entering KAIST in 2008 and onward: 775 points in TOEIC; or 690 points in TEPS

▫ Students entering KAIST in 2007 or before: 760 points in TOEIC; or 670 points in TEPS

※ Requirements for a dual major : 40 credits including mandatory major courses

※ Requirements for a 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

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※ General and basic courses in undergraduate program are different from years of admission; therefore, students entering KAIST before 2009 should refer to the Course Completion Requirements by Year of Admission.

❑ Master's Program

1) Thesis Master's Degree

General Course	Major Course		Research	Total
	Mandatory	Elective		
3 and 1AU	3	18 or more	6 or more	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
   - Mandatory general courses can not be counted as elective major cources.
   - CC010 Special Lecture on Leadership(non-credit, this applies to students entering KAIST in 2002 and onward; general scholarship students, foreign students are excluded)
   - CC020 Ethics and Safety I(1AU)

C. Mandatory Major Course : 3 credits
   - Electronics design Lab.

D. Elective Course : At least 18 credits
   - 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 6 credits
   - M.S. Thesis (at least 4 credits), Seminar (Seminar is elective for foreign student)(1), Technical Writing (1)

2) Non-thesis Master's Degree
   A. Graduation Credits : At least 33 credits and 1 AU
   B. Mandatory General Course : 3 credits and 1 AU
      - 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 onward; general scholarship students, foreign students are excluded)
      - CC020 Ethics and Safety I(1AU)
   C. Mandatory Major Course : 3 credits
      - Electronics design Lab.
   D. Elective Course : At least 24 credits
      - 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: at least 6 credits
      - Seminar (Seminar is elective for foreign student)(1), Technical Writing (1), 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

General Course	Major Course		Research	Total
	Mandatory	Elective		
3 and 1AU	3	24	30	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 (Seminar is elective for foreign student) (1)

❑ Design course for Renaissance Program
  ◦ EE512 System programming