

Course Requirements

□ Undergraduate Courses

General Courses			Basic Courses			Major Courses			Elective Courses	Research	Total
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
6(9AU)	21	27(9AU)	27	9	36	18	24	42	22	3	130

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 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 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: Including General Chemistry II (3) at least 6 credits
 - ※ Students having a double major take 3 credits.
- D. Major Course: at least 42 credits
- Mandatory Major Courses : at least 18 credits
Molecular Biology, Biochemistry I, Biochemistry II, Biochemistry Experiment, Cell Biology, Physical Chemistry for Life Science.
 - Elective Major Courses : at least 24 credits
Genetics, Laboratory in Cell Biology & Genetics, Developmental Biology, Evolution and Ecology or Introductory Biotechnology, Biotechnology Experiment, Microbial and Cell Biotechnomogy, Biological Engineering.
- E. Elective Courses: at least 26 credits
- Should include Organic Chemistry I (offered by the Dept. of Chemistry). Students majoring in Dept. Chemical and Biomolecular Engineering can take Industrial Organic Chemistry (offered by the Dept. Chemical and Biomolecular Engineering) instead of organic chemistry.
 - At least 9 credits should be taken from mandatory major courses, elective major courses, or elective basic courses offered by various academic departments in KAIST.
 - Besides 12 credits mentioned above, student can take any courses (including Internship Program, Specified Research, Seminar and any other courses).
 - ※ Student entering before 2007 should take at least 28 credits.
 - ※ Student entering in 2008 or after 2008 should take at least 26 credits.
- F. Research Course: at least 3 credits
- Thesis Research (Required): at least 3 credits
 - Specified Research (Elective): at least 1 credits
 - Seminar (Elective): at least 2 credits
 - ※ 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 double major : 40 credits including mandatory major courses
 - ※ Requirements for a minor : The students should take 21 credits of the major courses including 12 credits of courses with -0- or -1- or with -0- and -2- in the tenth digit.

※ 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.

- Follow-up measures: Applies to-be all students since from the day of its operation (2008.7.1).

□ Master's Program

Mandatory General Course	Major Course		Research	Total
	Mandatory	Elective		
3	6	9	15	33

1) Thesis Master's Degree

- A. Graduation Credits : At least 33 credits total
- B. Mandatory General Course : 3 credits and 1AU
 - One course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials Science and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, 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 : 6 credits.
- D. Elective Course : 9 credits.
- E. Research Credits : Within 15 credits including 2 from Seminar (Ordinary scholarship students need to earn at least one credit from Seminar).

2) Coursework Master's Degree

- A. Graduation Credits : At least 33 credits total
- B. Mandatory General Course : 3 credits and 1AU
 - One course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials Science and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, 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 : 6 credits.
- D. Elective Course : 15 credits.
- E. Research Credits : Within 9 credits including 7 from specified Research and 2 from Seminar (Ordinary scholarship students need to get at least 1 credit from Seminar and 8 credits from Specified Research).
 - * Applies to-be Ph.D. candidates only.

□ Doctoral Program

Mandatory Course	Major Course		Research	Total
	Mandatory	Elective		
3	6	18	33	60

A. Graduation Credits : At least 60 credits total.

B. Mandatory General Course : 3 credits and 1AU

- One course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials Science and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure, CC532 Collaborative System Design and Engineering

- CC020 Ethics and Safety I(1AU)

C. Mandatory Major Course : 6 credits.

D. Elective Course : 18 credits.

E. Research Credits : Within 33 credits including 4 from Seminar (Ordinary scholarship students need to get at least 1 credit from Seminar).

※ The course credits earned in the Master's course work can be used towards the Doctoral degree(except research credits).