Course Requirements

❏ Undergraduate Program

General Courses			Basic Courses			Major Courses			Elective Courses	Research	Total
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
7(8AU)	21	28(8AU)	23	9	32	18	24	42	24	4	130

A. Graduation Credits

    At least 130 credits total

B. General Course Requirements: at least 28 credits

    ○ Mandatory General Courses : 7 credits and 8 AU (1 AU means 1 hour activity/work a week for a semester)

        - Students who entered the KAIST in or before 2006

         · "English I," "English II," and "Writing" : 7 credits

         · 4 AU of "Community Service"(64 hours), 4AU of "Physical Education"(64 hours) : 8 AU

        - Students who enter the KAIST in or after 2007

         · "English Communication I", "English Communication II", "English Reading & Writing", and "Writing" : 7 credits

         · 2 AU of "Community Service"(32 hours), 4AU of "Physical Education"(64 hours), 2AU of "Humanity/Leadership": 8 AU

           ※ AU is not counted for GPA but required for graduation.

    ○ Elective Courses in Humanities & Social Science : at least 21 credits (at least 7 courses)

        - Take (15 credits) 1 course from each of 5 divisions : Science Technology; Literature and Art; History and philosophy; Social Science; Foreign Language and Linguistics

        - Remaining courses can be chosen regardless of the division.

      ※ Requirement for Foreign Language and Linguistics: students should take at least 1 course of a second foreign language other than English.

C. Basic Course Requirements: at least 32 credits

    ○ Mandatory Basic Courses: 23 credits (1 course from each of the following 9 categories)

        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 Advanced 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. II (1)

        ⑨ 1 course of Basic Programming (3) or Advanced Programming (3)

      ○ Elective Basic Courses: Including General Chemistry II (3) at least 9 credits

D. Major Course Requirements: 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. Research Course Requirements: at least 4 credits

    ○ Thesis Research (Required): at least 3 credits

○ Specified Research (Required): at least 1 credits

○ Seminar (Elective): at least 2 credits

F. Elective Courses: At least 24 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 18 credits should be taken from mandatory major courses, elective major courses, research courses, or elective basic courses offered by various academic departments in KAIST

G. English Language Requirements for Graduation

　○ One of the following requirements should be satisfied for graduation before entering school or while in school:

- PBT TOEFL(ITP) score : at least 560

- CBT TOEFL score : at least 220

- iBT TOEFL score: at least 83

- TOEIC score : at least 760

- TEPS score : at least 670

H. Minor and Double Major

　○ Double Major: Same as requirements mentioned above (completion of the Thesis Research course and other research courses for the second major is not mandatory for students who entered in or after 2001).

　○ Minor Major: 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.

❏ Master's Programs

Mandatory General Course	Major Course		Research	Total
	Mandatory	Elective		
3	-	15	18	36

1) Thesis Master's Degree Program

A. Graduation Credits: At least 36 credits total

B. Mandatory General Course: 3 credits

　○ One course among CC500 Science Writing in English, 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

　○ Be sure to take the non-credit Leadership Class (CC010), mandatory for students who entered during or after the 2002 academic year.

C. Mandatory Major Course: None.

D. Elective Major Course: 15 credits.

E. Research: Within 18 credits including 2 from Seminar (Ordinary scholarship students need to earn at least one credit from Seminar).

2) Coursework Master's Degree Program

A. Graduation Credits: At least 36 credits total

B. Mandatory General Course: 3 credits

　○ One course among CC500 Science Writing in English, 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

○ Be sure to take the non-credit Leadership Class (CC010), mandatory for students who entered during or after the 2002 academic year.

C. Mandatory Major Course : None.

D. Elective Major Course : 21 credits.

E. Independent Study in M.S. : Within 12 credits including 2 from Seminar (Ordinary scholarship students need to get at least 1 credit from Seminar).

   * Applies to to-be Ph.D. candidates only.

❏ Doctoral Programs

Mandatory Course	Major Course		Research	Total
	Mandatory	Elective		
3	-	24	45	72

A. Graduation Credits: At least 72 credits total.

B. Mandatory General Course: 3 credits.

C. Mandatory Major Course: -

D. Elective Major Course: 24 credits.

E. Research: Within 45credits including 4 from Seminar (Ordinary scholarship students need to get at least 1 credit from Seminar).

   * Credits taken during the master's program at KAIST are automatically transferred to the Ph.D. program.

   * The seminar requirement is applied to all graduate students enrolled.