

## Course Requirements

### □ Undergraduate Courses

| General Courses |          |          | Basic Courses |          |          | Major Courses |          |          | Elective Courses | Research | Total |
|-----------------|----------|----------|---------------|----------|----------|---------------|----------|----------|------------------|----------|-------|
| Mandatory       | Elective | Subtotal | Mandatory     | Elective | Subtotal | Mandatory     | Elective | Subtotal |                  |          |       |
| 7(9AU)          | 21       | 28(9AU)  | 23            | 9        | 32       | 18            | 30       | 48       |                  | 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 28 credits and 9AU(applicable to students entering KAIST in 2014 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 2014 and thereafter: 7 credits and 9AU

English Presentation & Discussion(1), Advanced English Listening(1), Advanced English Reading(1), Advanced English Writing(1), Writing(3), Physical Education(4AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU), Happy College Life(1AU), Exciting College Life(1AU)

- 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)

\* Community service : not applicable, Submitting the confirmation of community service, the leadership mileage will be granted

- 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 → English Communication

English Communication II → English Conversation

English Reading&Writing → Critical Thinking in English

- Students entering KAIST between 1998 and 2006: 7 credits and 9AU

English I(2), English II(2) Writing(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU)

\* English I → English Communication

English II → Critical Thinking in English

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

- Take 1 course (9 credits) of each of the following 2 categories among 3 categories: Humanity, Society and Literature and Arts.

- Take 1 course (9 credits) of each of the following 3 categories among 5 categories: Science Technology, literary arts, philosophy of history, social science, foreign language and linguistic. (previous version of the Course Completion Requirements in 2009)

- Take 1 course (9 credits) of each of the following 2 categories among 3 categories: Humanity, Society and Literature and Arts. (revised version of the Course Completion Requirements in 2009)
  - 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)
- o 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((①~⑨), Freshman Design Course: Introduction to Design and Communication)(3))
  - o Elective Basic Courses: Including General Chemistry II (3) at least 9 credits
    - Students entered KAIST before 2011 should earn at least 6 credits including General Chemistry II.
    - \* Students having a double major should earn at least 6 credits including General Chemistry II.
    - Students entered KAIST before 2011 should earn at least 3 credits including General Chemistry II.
- D. Major Course: at least 48 credits
- o Mandatory Major Courses : at least 18 credits  
Molecular Biology, Biochemistry I, Biochemistry II, Biochemistry Experiment, Cell Biology, Cell Biology Experiment.
  - o Elective Major Courses : at least 30 credits  
Four Chemistry major courses (CH221 Organic Chemistry I, CH223 Organic Chemistry II, CH261 Analytical Chemistry, CH325 Biological Organic Chemistry) and three Bio&Brain Engineering major courses (BiS225 Anatomy & Physiology, BiS432 Biomedical Statistics, BiS438 Bioinformatics) are also considered as elective major courses.
- E. Elective Courses
- F. Research Course: at least 3 credits
- o Thesis Research (Required): at least 3 credits (Students having a double major are exempt)
  - o Specified Research (Elective): at least 1 credits
  - o Seminar (Elective): at least 2 credits

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 TOEFL | PBT TOEFL | CBT TOEFL | 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 TOEFL | PBT TOEFL | CBT TOEFL | 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   |

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

| Classification  | iBT TOEFL | PBT TOEFL | CBT TOEFL | 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 Double Major and Minor

- Double major : 40 credits including mandatory major courses
- Minor : Including 12 credits of subject with the ten-digits of subject number in 0, 21 credits or more major courses have to be completed.

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

□ Master's Program

| Mandatory General | Mandatory Major | Elective | Research | Total |
|-------------------|-----------------|----------|----------|-------|
| 3 + 1AU           | 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 thereafter; general scholarship students, foreign students are excluded)
  - CC020 Ethics and Safety I(1AU)
- C. Mandatory Major Course : 6 credits.
  - Advanced Molecular Cell Biology I, Advanced Molecular Cell Biology II (Applied to freshman who entered KAIST in 2008 and afterward).
- D. Elective Course : 9 credits.
- E. Research Credits : At least 15 credits including 13 from Thesis Research and 2 from Seminar (General scholarship students need to earn at least one credit from Seminar and at least 14 credits from thesis research).

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 thereafter; general scholarship students, foreign students are excluded)
  - CC020 Ethics and Safety I(1AU)
- C. Mandatory Major Course : 6 credits.
  - Advanced Molecular Cell Biology I, Advanced Molecular Cell Biology II (Applied to freshman who entered KAIST in 2008 and afterward).
- D. Elective Course : 15 credits.
- E. Research Credits : At least 9 credits including 7 from specified Research and 2 from Seminar (General scholarship students need to get at least 1 credit from Seminar and 8 credits from Specified Research).

□ Doctoral Program

| Mandatory General | Mandatory Major | Elective | Research | Total |
|-------------------|-----------------|----------|----------|-------|
| 3 + 1AU           | 6               | 15       | 36       | 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(IAU)

C. Mandatory Major Course : 6 credits.

- Advanced Molecular Cell Biology I, Advanced Molecular Cell Biology II  
(Applied to freshman who entered KAIST in 2008 and afterward).

D. Elective Course : 15 credits.

E. Research Credits : At least 36 credits.

- Seminar : At least 4 credits (General scholarship students need to get at least 1 credit)

- Graduate student seminar : At least 2 credits (at least 1 presentation)

- Thesis Research : At least 30 credits

(General scholarship students need to get at least 33 credits)

\* In case of graduate students seminar, general scholarship students can replace their credits to thesis research and foreign students can replace their credits to lectures in Korean.

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

#### □ Interim measures

1) Undergraduate course

- This completion requirement is applied to freshman who entered KAIST in 2010 fall semester.

- Graders must achieve either previous or revised completion requirement.

- Students who want to graduate with previous completion requirement but couldn't complete Evolution or Biochemistry can be replace for one of subject in elective major courses.

- Admissible substitute course for major subject

(Laboratory in Cell Biology & Genetics → Cell Biology Experiment)

(CH261 Analysis Chemistry → CH361 Analysis Chemistry Introduction)

2) Graduate course

- This completion requirement is applied to freshman who entered KAIST in 2011.

- Students who entered KAIST in 2010 must achieve either previous or revised completion requirement.