Course Requirements

□ 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 → 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 (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)
 - 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)
- ② 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))

- · Elective Basic Courses: at least 9 credits (MAS109, MAS201)
 - Students having entered KAIST in 2011 or before are required to take at least 6 credits
 - ** Students having double majors are required to take 3 credits or more with at least one of the two courses (MAS109 and MAS201).
- D. Major Course: at least 42 credits
 - · Mandatory Major Course : at least 14 credits

Bioengineering Fundamentals, Molecular and Cellular Biology, Bioengineering Laboratory ${\mathbb I}$, Bioengineering Laboratory ${\mathbb I}$

- o Elective Major Course : at least 28 credits
- E. Elective Course: 'Probability and Statistics' (MAS250) should be taken after 2006.
- F. Research Course: at most 7 credits. (even though you complete more than 7, we don't account the rest of the credits for your graduation.(including current existing students))
 - · Graduation research: 3 credits (required)
 - o Individual study: 2 or fewer credits
 - o Seminar: 2 credits (required)
- * Students having double majors are exempted.
- 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 Double Major and Minor
 - o Double major: 40 credits including mandatory major courses
 - · Minor: 18 credits including mandatory major courses

** 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

- A. Graduation Credits: at least 33 credits in total.
- B. Mandatory General Course: 3 credits and 1AU
 - 1 course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511
 Probability and Statistics, CC512 Introduction to Materials and Engineering, CC513 Engineering
 Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and
 Business Strategies, CC531 Patent Analysis and Invention Disclosure
 - 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: abolished
- D. Elective Course: at least 18 credits
 - (must complete at least 2 bio & brain engineering's graduate subjects whose second subject code no. is different from each other except BiS510 Technology Commercialization and Venture Business, BiS800 Special Lectures in Bio and Brain Engineering, BiS810 Leadership & Communication, BiS966 Seminar(Master), BiS987 Biofusion Seminar)
- E. Research Credits: at least 12 credits including BiS966 Seminar 2 credits, BiS987 Biofusion Seminar 2 credits (Foreign students are required to take one of the following classes: Korean classes (2 credits or more) or seminar class (BiS966, 2 credits))

■ Doctoral Program

- A. Graduation Credits: at least 60 credits in total.
- B. Mandatory General Course: 3 credits and 1AU
 - 1 course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531

Patent Analysis and Invention Disclosure,

- CC020 Ethics and Safety I(1AU)
- C. Mandatory Major Course: abolished
- D. Elective Course: at least 27 credits

(must complete at least 3 bio & brain engineering's graduate subjects whose second subject code no. is different from each other except BiS510 Technology Commercialization and Venture Business, BiS800 Special Lectures in Bio and Brain Engineering, BiS810 Leadership & Communication, BiS986 Seminar(Doctoral), BiS987 Biofusion Seminar)

- E. Research Credits: at least 30 credits including BiS986 Seminar 2 credits, BiS987 Biofusion Seminar 2 credits (Foreign students are required to take one of the following classes: Korean classes (2 credits or more) or seminar class (BiS986, 2 credits))
- ** The course credits earned in the Master's course work can be used towards the Doctoral degree(except research credits).

□ Measures for Change

1. Undergraduate Courses

All requirements apply to students entering after 2009. But, students entering before 2009 can choose between the previous requirements and current requirements. 2 credits of seminar (BiS496) in research credits are required for students entering after 2005.

- * alternative subject
- BiS331 Bio Computer Engineering → BiS437 Bio-Data Engineering or BiS438 Bioinformatics

2. Master's Courses

This requirements apply to students entering 2010. But, students entering before 2010 can choose between the previous requirements and current requirements. 2 credits of seminar in research credits are required for students entering after 2005, 2 credits of Biofusion seminar in research credits are required for students entering after 2007(Foreign students are required to take one of the following classes: Korean classes (2 credits or more) or seminar class (BiS966, 2 credits)).

3. Doctoral Courses

This requirements apply to students entering 2010. But, students entering before 2010 can choose between the previous requirements and current requirements. 2 credits of seminar in research credits are required for students entering after 2005, 2 credits of Biofusion seminar in research credits are required for students entering after 2007(Foreign students are required to take one of the following classes: Korean classes (2 credits or more) or seminar class (BiS986, 2 credits)).

- 4. Integrated Master's and Doctoral Degree Courses
 - Students who entered the program in between 2005 and 2008 must take Seminar for Master's (2 credits) and Seminar for Doctoral (2 credits).
 - Students who entered the program in 2009 or later, general rules for Integrated Master's and Doctoral Degree Program ("6.3. The curriculum credits and research credits earned from the Master's course may be cumulatively counted") are applied.