

Course Requirements

□ Undergraduate

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	25	3	130

A. Graduation Credits : At least 130 credits in total

B. General Course Requirements: At least 28 credits and 8 AUs

- Mandatory General Courses: 7 credits and 8 AUs.
- 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 General Courses in Humanities & Social Science: at least 21 credits (at least 7 courses).
- Take (15 credits in total) 1 course of each of 5 divisions: Science technology; Literature and Art; History and Philosophy; Social Science; Foreign Language and Linguistics; the rest course can be chosen regardless of division.

C. Basic Course Requirements: at least 32 credits

- Mandatory Basic Courses: 23 credits (Take 1 course from each of the following 9 categories).
 - ① 1 course: Fundamental Physics I (3), General Physics I (3), or Advanced Physics I (3)
 - ② 1 course: Fundamental Physics II (3), General Physics II (3), or 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: Basic Chemistry (3), General Chemistry I (3), or 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)
- Elective Basic Courses: at least 9 credits

D. Major Course Requirements: at least 42 credits

E. Elective Course Requirements: Take required major courses or Elective courses in other departments).

F. Research Course Requirements: at least 3 credits (Please refer to the departmental requirements for course completion).

- Please be sure to take 3 credit hours for graduation research (It can be replaced with 'Field Test,' etc.)
- Research credits include the credits that are earned from an independent study and seminar.

G. English Language Requirements for Graduation

- Those students who entered in 1998 or later must satisfy one of the following requirements 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

- Minor: at least total 21 credits are required (at least 15 credits from required basic courses and 6 credits from Elective basic courses that are designated in department).
- Double Major: at least 42 credits are required (as required in Nuclear and Quantum Engineering).

□ Master's Program

1) Thesis Master's Degree (at least 24 credits for course work + at least 12 research credits)

General Course	Major Courses	Research (including seminar credits)	Total
3	21	12	36

A. Graduate Credits: at least 36 credits

B. Mandatory General Courses: 3 credits

- Select one course from the following courses (CC500 Science Writing in English, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials Science and Engineering, CC513 Engineering Economics and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure) (NQE595 can replace CC500).

C. Mandatory Major Courses: None.

D. Elective Major Courses: at least 21 credits (15 credits from the Dept. of Nuclear and Quantum Engineering).

E. Research Credits: at least 12 credits (should include at least 2 credits in Seminar).

F. Others: One of the four courses, NQE201, NQE202, NQE203, NQE302, is recommended for students who did not major in Nuclear and Quantum Engineering in their undergraduate programs.

2) Coursework Master's Degree (at least 30 credits for coursework + at least 6 research credits)

General Course	Major Courses	Research (including seminar credits)	Total
3	27	6	36

A. Graduate Credits: at least 36 credits in total

B. Mandatory General Courses: 3 credits

- Select one course from the following courses: CC500 Science Writing in English, CC510 Introduction to Computer Application, CC511 Probability and Statistics, CC512 Introduction to Materials Science and Engineering, CC513 Engineering Economics and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies, CC531 Patent Analysis and Invention Disclosure) (NQE595 can replace CC500).

C. Mandatory Major Courses: None

D. Elective Major Courses: at least 27 credits (15 credits from Dept. of Nuclear and Quantum Engineering).

E. Research Credits: at least 6 credits (including independent research and seminar).

F. Others: The course-work plan is applied to international students if they wish and upon the academic advisor's approval.

□ Doctoral Degree (at least 42 credits for course-work + at least 30 research credits)

General Course	Major Courses	Research (including seminar credits)	Total
3	39	30	72

A. Graduate Credits: at least 72 credits in total.

- B. Mandatory General Courses: 3 credits (The student who already earned 3 credits in Master's course does not need to have 3 credits again).
- C. Mandatory Major Courses: None.
- D. Elective Major Courses: at least 39 credits (18 credits in Dept. of Nuclear and Quantum Engineering).
- E. Research Credits : at least 30 credits (should include at least 3 credits in Seminar).
- F. Others :
- ① The credits that are earned in Master's course will be accumulated to the graduate credits for Doctoral degree (exclude research credits).
 - ② Two or more courses among NQE201, NQE202, NQE203, and NQE302 are recommended for the students who did not major in Nuclear and Quantum Engineering in undergraduate course or Master's course.