

Course Requirements

☐ Undergraduate Requirement

General Course			Basic Course			Major Course			Elective Course	Research	Total
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
7 (8 AU)	21	28 (8 AU)	23	9	32	9	38	47	19	4	130

A. Required Credits for Graduation: at least 130 credits.

B. General Course Requirements: at least 28 credits & 8 AU

○ Mandatory General Courses: 7 Credits and 8 AU

- English I, English II, Writing Course: 7 Credits
- Community Services (4 AU, 64 hr), Athletics (4 AU, 64 hr)

○ Elective General Courses in Humanities & Social Science: at least 21 Credits

- Take at least 1 course in each 5 divisions: Science and Technology, Literature and Art, History and Philosophy, Social Science, Foreign Language and Linguistics.

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 Differential & Integral Calculus I (3) or Advanced Differential & Integral Calculus I (3)
- ⑥ 1 course of Differential & Integral Calculus II (3) or Advanced Differential & Integral Calculus II (3)
- ⑦ 1 course: Basic Chemistry I (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.

- Introduction to Linear Algebra (3), Applied Differential Equations (3), Applied Mathematical Analysis (3).

D. Major Course Requirements: at least 47 credits

○ Mandatory Major Courses: 21 credits

- Electronics Lab I , Electronics Lab II, Electronics Design Lab.

○ Elective Major Courses: at least 38 credits.

- Select at least 4 courses from the following 8 underlined courses:

Circuit Theory, Signals and Systems, Digital System Design, Electromagnetics I, Electronic Circuits I, Electronic Circuits II, Introduction to Physical Electronics, Programming for Electrical Engineering.

- Individual Study counts up to 4 credits.

E. Elective Course Requirements: at least 19 credits

- from all courses in the undergraduate program.

F. Research Course Requirements: at least 4 credits

- B.S Thesis Research (3), Seminar (1)

G. English Language Requirements

One of the following requirements should be satisfied before graduation:

- PBT TOEFL score: at least 560
- CBT TOEFL score: at least 220
- TOEIC score: at least 760
- TEPS score: at least 670

H. EE Minor and EE Double Major

- EE Minor: at least 21 credits in major courses including

- Circuit Theory, Signals and Systems, Digital System Design, Electromagnetics I, Electronic Circuits I, Electronics Lab I.
- EE Double Major:
 - At least 9 credits in mandatory major courses, and at least 38 credits in elective major courses.
 - Select at least 4 courses from the following 8 underlined courses:
Circuit Theory, Signals and Systems, Digital System Design, Electromagnetics I, Electronic Circuits I, Electronic Circuits II, Introduction to Physical Electronics, Programming for Electrical Engineering.

□ Master's and Doctoral Programs

1) Master's Program

General Course	Major Course		Research	Total
	Mandatory	Elective		
3	3	18 or more	6 or more	36

- **Required Credits for Graduation: at least 36 credits.**
- **General Courses:** 3 credits
 - 1 course of Scientific Writing in English, Introduction to Computer Application, Probability and Statistics (Substitutive subject: EE521), Introduction to Materials Science, Engineering Economy and Cost Analysis, or Entrepreneurship and Business Strategies.
- **Mandatory Major Courses:** 3 credits
 - Electrical Engineering Lab.
- **Elective Major Courses:** at least 18 credits
 - At least 2 courses from the EE500-level or above.
 - At least 4 courses among
 - EE400-level courses designated as common course for BS and M.S.
 - EE500-level or above (M.S. courses in EE department)
 - xx500-level or above (M.S. courses from other departments).
- **Research:** at least 6 credits
 - M.S. Thesis (at least 4 credits), Seminar (1), Technical Writing (1)

2) Doctoral Program

General Course	Major Course		Research	Total
	Mandatory	Elective		
3	3	36	31	73

- **Required Credits for Graduation: at least 73 credits in total.**
- **General Course:** 3 credits (Same as M.S.)
- **Mandatory Major Courses:** 3 credits (Same as M.S.)
- **Elective Major Courses:** at least 36 credits
 - At least 2 courses among EE600 level or above.
 - EE500 or above (M.S. and Ph.D. courses in EE department)
 - xx500 or above (M.S. and Ph.D. courses from other departments)
 - Credits taken in the master's program except research and seminar credits can be accumulatively counted towards doctoral program credit. (EE400-level courses designated as common course for B.S. and M.S. are also counted.)
- **Research:** at least 31 credits including Seminar (1)

※ Taking Undergraduate Courses in Doctoral Program:

Doctoral students who obtained a B.S. degree from another department can take up to 6 credit hours of undergraduate courses after approval of the research advisor and the department chair.

- ※ This Requirements are applicable to 2005 M.S. students and 2007 Ph.D. students. Students who entered the M.S. course program before 2004 and the Ph.D. course program before 2006 have to follow the previous requirements.