Major Course Requirements
for School of Electrical Engineering
(For undergraduate students admitted in 2015 or before)

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 130 credits

▣ **Note for General Courses (Only for EE Students)**

○ **Elective Basic Courses:** at least 9 credits

- at least two courses among MAS109 Introduction to Linear Algebra, MAS201 Differential Equations and Applications, and MAS202 Applied Mathematical Analysis

※ Requirement for a Double Major : at least 3 credits

- at least one course among MAS109 Introduction to Linear Algebra, MAS201 Differential Equations and Applications, and MAS202 Applied Mathematical Analysis

▣ **Major:** at least 53 credits

○ **Mandatory Major Courses:** 18 credits

-EE305 Introduction to Electronics Design Lab., EE405 Electronics Design Lab., EE201 Circuit Theory, EE202 Signals and Systems, EE204 Electromagnetics, EE209 Programming Structure for Electrical Engineering

○ **Elective Major Courses:** at least 35 credits

- Individual Study counts up to 4 credits.
- EE students having a double major (or a minor) take total of at least 29 credits

▣ **Minor:** At least 21 credits in major courses including

- EE201 Circuit Theory, EE202 Signals and Systems, EE204 Electromagnetics, EE303 Digital System Design, EE304 Electronic Circuits, EE305 Introduction to Electronics Design Lab.

※ In the event that major courses and minor courses overlap, up to 9 credits can be applied to both courses of study.

▣ **Double Major:** at least 40 credits including mandatory major courses

※ In the event that major courses and double major courses overlap, up to 9 credits can be applied to both courses of study.

▣ **Research Courses:** at least 4 credits

- B.S. Thesis Research, Seminar
- Seminar is elective for International student.
- Students having a double major are exempt.

◎ Maximum of 9 credits of 24-Week Internship Program <EE Co-op 1> can be substituted for Electronics Design Lab.(3), B.S. Thesis Research(3) and Elective Course(3). Maximum of 3 credits of 24-Week Internship Program <EE Co-op 2> can be granted as graduation credits.

☐ **Transitional measures**

- Students admitted in 2015 or before may choose to be governed by the completion requirements applicable to students admitted in 2016 and after if desired.
- The credit grant policy of 24-Week Internship Program <EE Co-op 1,2> are applicable to all students.
- The above requirement is applicable to students who were admitted in 2014 and 2015. Students who were admitted in 2013 and before should follow the requirement for the year of admission.
- Requirement for Mandatory and Elective Major Courses

classification	Between 2004 and 2008	Between 2009 and 2013	Between 2014 and 2015
Mandatory	6 EE305 Electronics Lab. I EE405 Electronics Design Lab.	18 EE201 Circuit Theory EE202 Signals and Systems EE204 Electromagnetics EE209 Programming for Electrical Engineering EE305 Introduction to Electronics Design Lab. EE405 Electronics Design Lab.	18 EE201 Circuit Theory EE202 Signals and Systems EE204 Electromagnetics EE209 Programming for Electrical Engineering EE305 Introduction to Electronics Design Lab. EE405 Electronics Design Lab.
Elective	41 EE201 Circuit Theory	29	35

classification	Between 2004 and 2008	Between 2009 and 2013	Between 2014 and 2015
	EE202 Signals and Systems EE203 Digital System EE204 Electromagnetics I EE206 Electronic Circuits I EE209 Programming for Electrical Engineering EE301 Electronic Circuits II EE302 Introduction to Physical Electronics		
Research	EE490 B.S. Thesis Research EE496 Seminar	EE490 B.S. Thesis Research EE496 Seminar	EE490 B.S. Thesis Research EE496 Seminar

※ Students who were admitted between 2004 and 2008 should take 4 courses among the underlined 8 courses.

- Substitutes for abolished and changed courses
  - EE305 Electronics Lab. I → EE305 Analog Electronics Design Lab. → EE305 Introduction to Electronics Design Lab.
  - EE208 Electronics Lab. II→ EE306 Digital Electronics Design Lab
  - EE307 Electronics Lab. III → EE405 Electronics Design Lab.
  - EE308 Electronics Lab. IV → EE308 Applied Electronics Lab. → EE305 Introduction to Electronics Design Lab.
  - EE406 Project Lab → EE405 Electronics Design Lab.
  - EE204 Electromagnetics I → EE204 Electromagnetics
  - EE341 Electromagnetics II → EE341 Electromagnetic waves and antennas
  - EE206 Electronic Circuits I → EE304 Electronic Circuits
  - EE301 Electronic Circuits II → EE403 Analog circuits
  - EE210 Probability and Introductory Random Processes for Electrical Engineers → EE210 Probability and Introductory Random Processes
  - EE209 Programming for Electrical Engineering → EE209 Programming Structure for Electrical Engineering
  - EE372 Integrated Circuits Design→ EE372 Digital Electronic Circuits
  - EE413 Networking Design and Programming → EE324 Network Programming
  - EE421 Communication Systems → EE421 Wireless Communication Systems → EE421 Communication Systems

- In case the interim measures are difficult to be applied, Head of EE shall decide through Education Committee.

Major Course Requirements
for School of Electrical Engineering
(For undergraduate students admitted in 2016 and after)

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 136 credits

※ Required to choose and complete one among Advanced Major, Double Major, Minor, and Individually Designed Major.

▣ **Note for General Courses (Only for EE Students)**

○ **Elective Basic Courses:** at least 9 credits

- at least two courses among MAS109 Introduction to Linear Algebra, MAS201 Differential Equations and Applications, and MAS202 Applied Mathematical Analysis

※ Requirement for a Double Major : at least 3 credits

- at least one course among MAS109 Introduction to Linear Algebra, MAS201 Differential Equations and Applications, and MAS202 Applied Mathematical Analysis

▣ **Major:** at least 50 credits

○ **Mandatory Major Courses:** 18 credits

- EE305 Introduction to Electronics Design Lab.(3), EE405 Electronics Design Lab.(3), EE201 Circuit Theory(3), EE202 Signals and Systems(3), EE204 Electromagnetics(3), EE209 Programming Structure for Electrical Engineering(3)

○ **Elective Major Courses:** at least 32 credits

- Individual Study counts up to 4 credits.

▣ **Advanced Major :** at least 12 credits

▣ **Individually Designed Major:** at least 12 credits

- 12 credits of two or more major courses other than EE

▣ **Minor:** at least 21 credits

- At least 12 credits from mandatory major courses including

EE305 Introduction to Electronics Design Lab.

※ Duplication of credits is not allowed.

▣ **Double Major:** at least 40 credits including mandatory major courses

※ In the event that major courses and double major courses overlap, up to 6 credits can be applied to both courses of study.

▣ **Research Courses:** at least 4 credits including

- B.S. Thesis Research, Seminar
- Seminar is elective for International student.
- Students having a double major are exempt.

◎ Maximum of 9 credits of 24-Week Internship Program <EE Co-op 1> can be substituted for EE405 Electronics Design Lab.(3), B.S. Thesis Research(3) and Elective Course(3).

Maximum of 3 credits of 24-Week Internship Program <EE Co-op 2> can be granted for graduation credits.

☐ **Transitional measures**

- Students admitted in 2015 or before may choose to be governed by the completion requirements listed above if desired.
- The credit grant policy of 24-Week Internship Program <EE Co-op 1,2> are applicable to all students.

Major Course Requirements
for School of Electrical Engineering
(For Master's Program)

Thesis Mater's Degree Program

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 33 credits

▣ **Mandatory General Courses:** At least 3 credits and 1AU
- One course among CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics (Substitutive subject: EE528), CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC530 Enterpreneurship and Business Strategies, or CC531 Patent Analysis and Invention Disclosure, and CC532 Collaborative System Design and Engineering

▣ **Mandatory Major Courses:** None

▣ **Elective Courses:** At least 21 credits
- ○ EE509 Technical Writing (1 credit) must be included. (Technical Writing is elective for International students)
- ○ At least 9 credits from the EE500-level or above.
- ○ EE400-level courses (However, the courses must be mutually recognized courses for undergraduate and graduate.)
- ○ xx500-level or above courses from other majors.

▣ **Research Courses:** At least 5 credits including
- ○ M.S. Thesis (at least 4 credits), Seminar(1) (Seminar is elective for International student.)

Coursework Master's Degree Program

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 33 credits

▣ **Mandatory General Courses:** At least 3 credits and 1AU

(Same as Thesis Master's Degree requirements)

▣ **Mandatory Major Courses:** None

▣ **Elective Courses:** At least 27 credits

- ○ EE509 Technical Writing (1 credit) must be included.
  (Technical Writing is elective for International students)
- ○ At least 9 credits from the EE500-level or above.
- ○ EE400-level courses (However, the courses must be mutually recognized courses for undergraduate and graduate.)
- ○ xx500-level or above courses from other majors.

▣ **Research:** At least 5 credits

- ○ Seminar(1)(Seminar is elective for International student), Maximum of 1 credit for Individual Study is allowed.

◎ Coursework Master's Degree Program is offered only for students who joined to dual degree program.

☐ **Transitional Measures**

- This requirement is applied to the students who were admitted in 2015 and thereafter. Students who were admitted in 2014 and before should follow the requirements for the year of admission and the curriculum reduction regulations enforced in Feb. 2009.
- Substitutes for abolished and changed courses
  - ◦ EE505 Electronics Lab. → EE505 Electronics design Lab. → One course(3 credits) among EE5XX courses
  - ◦ EE521 Random Processes → EE528 Engineering Random Processes
  - ◦ EE665 IC Process Technology → EE665 CMOS Front-end Process Technology
- Requirement of EE509 Technical Writing is applied to students who were admitted in 2011 and thereafter.

Major Course Requirements
for School of Electrical Engineering
(For Doctoral Program)

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 60 credits

▣ **Mandatory General Courses:** 3 credits and 1AU
(Same as Thesis Master's Degree Program requirement)

▣ **Mandatory Major Courses:** None

▣ **Elective Courses:** At least 27 credits
- ○ At least 6 credits from the EE600-level or above.
- ○ Remaining credits can be earned from the xx-500 level or above courses from any department.
- ○ Credits taken in the master's program, except the research and seminar credits, can be accumulatively counted. (EE400-level courses designated as mutually recognized courses for undergraduate and graduate are also counted.)

▣ **Research Courses:** at least 30 credits (the following credits must be included)
- ○ Ph.D. Seminar (1) (Seminar is elective for International student)
- ○ Ph.D Thesis Seminar (1)

☐ **Transitional Measures**

- This requirement is applied to the students who were admitted in 2015 and thereafter. Students who were admitted in 2014 and before should follow the requirements for the year of admission and the curriculum reduction regulations enforced in Feb. 2009.
- Substitutes for abolished and changed courses
  - ◦ EE505 Electronics Lab. → EE505 Electronics design Lab. → One course(3 credits) among EE5XX courses
  - ◦ EE521 Random Processes → EE528 Engineering Random Processes
  - ◦ EE665 IC Process Technology → EE665 CMOS Front-end Process

Technology

- Requirements of Ph.D. Thesis Seminar is applied to students who were admitted in 2014 and thereafter.

Major Course Requirements
for School of Electrical Engineering
(For MS-PhD Integrated Program)

Please check the common graduation requirements.

▣ **Credit Requirement for Graduation:** Required to complete a total of more than 33 credits

▣ **Mandatory General Courses:** 3 credits and 1AU
(Same as Thesis Master's Degree Program requirements)

▣ **Mandatory Major Courses:** None

▣ **Elective Courses:** At least 27 credits
- ○ EE509 Technical Writing
  (Technical Writing is elective for international students)
- ○ At least 6 credits from the EE600-level or above.
- ○ Remaining credits can be earned from the xx500-level or above courses from any department.
- ○ Credits taken in the master's program, except the research and seminar credits, can be accumulatively counted. (EE400-level courses designated as mutually recognized courses for undergraduate and graduate are also counted.)

▣ **Research Courses:** at least 30 credits
(the following credits must be included)
- ○ M.S. Seminar (1), Ph.D. Seminar (1)
  (Seminar is elective for International student)
- ○ Ph.D Thesis Seminar (1)

☐ **Transitional Measures**
- This requirement is applied to the students who were admitted in 2015 and thereafter. Students who were admitted in 2014 and before should follow the requirements for the year of admission and the curriculum reduction regulations enforced in Feb. 2009.
- Substitutes for abolished and changed courses
  - ◦ EE505 Electronics Lab. → EE505 Electronics design Lab. → One course(3 credits) among EE5XX courses
  - ◦ EE521 Random Processes → EE528 Engineering Random Processes

◦ EE665 IC Process Technology → EE665 CMOS Front-end Process Technology

- Requirement of EE509 Technical Writing is applied to students who were admitted in 2011 and thereafter.
- Requirement of Ph.D. Thesis Seminar is applied to students who were admitted in 2014 and thereafter.