

## Course Requirements

Course	Course Credits			Research	Total
	General Course	Elective Essential Course	Elective Major Course		
Master	3	3	18 or more	6	33 or more
Ph.D	3	3	24 or more	30	60 or more

### □ Master program

- A. Graduation Credits: at least 33 credits or 1AU
- B. Mandatory General Courses: Minimum of 3 credits(1 courses) and 1AU
  - CC010 Leadership seminar (Credits are not granted, but it is a required course, except part-time and foreign students).
  - CC020 Ethics and Safety I(1AU), CC500 Scientific Writing, CC510 Introduction to Computer Applications, CC511 Probability and Statistics, CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments
- C. Mandatory Major Courses: None
- D. Elective Courses: Minimum of 21 credits
  - Elective Essential Course: Minimum of 3 credits(At least 1 course in division of future vehicle)
  - Elective Major Course: Minimum of 18 credits(At least 2 course in division of future vehicle)
  - ※ Course with 400, 500 units in Mechanical Engineering, Electrical Engineering, and Computer Science.(Note: Only common courses for undergraduate/graduate students in the case of 400-unit courses)
- E. Research: Minimum of 6 credits (including 1 seminar credits)
  - It could be substituted with research course in the student's department.

### □ Doctoral program

- A. Graduation Credits: at least 60 credits or 1AU
- B. Mandatory General Courses: Minimum of 3 credits and 1AU  
(Not required, if you have already fulfilled this in the master's program)
  - CC020 Ethics and Safety I(1AU), CC500 Scientific Writing, CC510 Introduction to Computer Applications, CC511 Probability and Statistics, CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments
- C. Mandatory Major Courses: None
- D. Elective Courses: Minimum of 27 credits
  - Elective Essential Course: Minimum of 3 credits(At least 1 course in division of future vehicle)  
(Not required, if you have already fulfilled this in the master's program)
  - Elective Major Course: Minimum of 24 credits(At least 2 course in division of future vehicle)
  - ※ Course with 400, 500 units in Mechanical Engineering, Electrical Engineering, and Computer Science.(Note: Only common courses for undergraduate/graduate students in the case of 400-unit courses)
- E. Research: Minimum of 30 credits (including 1 seminar credits)
  - It could be substituted with research course in the student's department.

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