

## Course Requirements

Course	Course Credits			Research	Total
	General Course	Elective Essential Course	Elective Major Course		
Master	3	9	9	At least 12	At least 33
Ph.D	3	9	18	At least 30	At least 60

### □ Master Program

- A. Graduation Credits: At least 33 credits
- B. General Courses : 3 credits
  - Should select at least 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.
  - CC010 Leadership seminar (Credits are not granted, but it is a mandatorily required course, except part-time and foreign students)
  - CC020 Ethics and Safety I (1AU)
- C. Elective Courses : At least 18
  - Elective Essential Courses : At least 9
    - Should select at least 3 courses among EE581 Linear Systems, MAE553 Robot Dynamics, MAE655 Robotics Engineering, EE683 Robot Control, CS510 Computer Architecture, RE510 Intelligent Robot Design Lab.
  - Elective Major Courses : 9 credits
    - Take at least 9 credits among the courses offered in the Robotics Program.
- D. Research: At least 12 credits
  - It could be substituted with research course in the student's department.

### □ Ph.D. Program

- A. Graduation Credits: At least 60 credits
- B. General Courses : 3 credits
  - Not required, if you have already fulfilled this in the master's program.
- C. Elective Courses : At least 27
  - Elective Essential Courses : At least 9
    - Should select at least 3 courses among EE581 Linear Systems, MAE553 Robot Dynamics, MAE655 Robotics Engineering, EE683 Robot Control, CS510 Computer Architecture, RE510 Intelligent Robot Design Lab.
  - Elective Major Courses : 18 credits
    - Take at least 18 credits among the courses offered in the Robotics Program.
- D. Research: At least 30 credits
  - It could be substituted with research course in the student's department.
- E. Others: Credits earned in the master's program are accumulated in the Ph.D. program. (Except for research credits).

- **CC020 Ethics and Safety I(1AU) (all students must complete the course to graduate during the master's course or the doctor's course one time)**