Major Course Requirements for Robotics Program

(M.S. Degree)

Thesis M.S Degree Program

Credit Requirement: 33 credits or more in total

General Required Courses: 3 credits or more

O Courses designated by the Department:

- At least 1 course among the following: CC500 Scientific Writing, CC510 Introduction to Computer Application, CC511 Probability and Statistics (Substitutive course: EE528 Engineering Random Processes), CC512 Introduction to Materials and Engineering, CC513 Engineering Economy and Cost Analysis, CC522 Introduction to Instruments, CC530 Entrepreneurship and Business Strategies
- CC010 Special Lecture on Leadership (No credit. Mandatory course for students enrolled from 2002, except general scholarship students or international students)
- CC020 Ethics and Safety I (1AU) is mandatory

Elective Courses: 18 credits or more

O At least nine credits must included from the following subjects, and earn a total of 27 credits or more from elective subjects designated by the Robotics Program (%Refer to the Table of Curriculum)

| 과목 번호 | 과목명 |
|----------|--|
| RE510 | Intelligent Robot Design Lab |
| EE511 | Computer Architecture |
| EE534 | Pattern Recognition |
| EE581 | Linear Systems |
| EE585 | Mobile Robotics and Autonmomous Navigation |
| EE682 | Intelligent Control Theory |
| EE683 | Robot Control |
| EE735 | Computer Vision |
| CS477 | Introduction to Intelligent Robotics |
| CS510 | Computer Architecture |
| CS550 | Software Engineering |
| CS554 | Design for Software and System |
| CS570 | Artificial Intelligence and Machine Learning |
| CS572 | Intelligent Robotics |
| CS576 | Computer Vision |
| CS672 | Reinforcement Learning |
| ME453 | Introduction to Robotics Engineering |
| ME459 | Introduction for Visual Intelligence |
| ME553 | Robot Dynamics |

| ME652 Mobile Robotics ME655 Robotics Engineering | |
|---|--|
| ME655 Bobotics Engineering | |
| ME000 Hobbiles Engineering | |
| CE583 Advanced Dynamic and Nonlinear Control of Civil Robots | |
| AI502 Deep Learning | |
| Al611 Deep Reinforcement Learning | |
| XHowever, recognition is possible even if you take a substitute or shared course for the listed course. | |
| • Up to six credits of unit 500 or higher may be taken among courses | |
| other than those designated by this Program. | |
| Research Courses: 12 credits or more | |
| O At least 12 credits of research courses, including the M.S. Seminar | |
| course (1 credit), are required. | |
| O May be substituted by the research courses in the department/major | |
| of student's advisor. (If the advisor changes his or her | |
| department/major, the research courses taken in the previous | |
| department/major are also accepted) | |
| Transitional Measures | |
| O Subject Requirements herein apply to all enrolled students since | |
| Spring 2024 | |