## 機器人碩士學位學程

## 113 學年度

| 最低修業年限  | 1年   |
|---------|--|
| 應修學分    | 24 學分:含本學程核心課程12 學分(必修4門選1門);修業期間每學期需修習論文  |
|         | 研討(書報討論)通過,至多4 學期。                         |
|         | *為本學程必修課                                   |
| 應修(應選)課 | *感測與智慧系統(3學分)                              |
| 程及符合畢業  | *深度學習(3學分)                                 |
| 資格之修課相  | *機器學習(3 學分)                                |
| 關規定     | *機電系統設計與實務(3學分)                            |
|         | (1)機器人學(3學分)                               |
|         | (2)自走式機器人(3學分)                             |
|         | (3)自主駕駛車技術(3學分)                            |
|         | (4)電腦視覺(3學分)                               |
|         | (5)車輛視覺系統(3學分)                             |
|         | (6) 感測器原理與量測系統(3學分)                        |
|         | (7)人體神經力學(3學分)                             |
|         | (8)非線性控制系統(3學分)或非線性系統理論(3學分)               |
|         | (9)深度學習實驗(3學分)                             |
|         |  |
| 備註      | 1. 依據本校大學學術倫理教育課程實施辦法,入學第一學期結束前需至「臺灣學術倫    |
|         | 理教育資源中心」平台修習學術倫理課程,並通過課程總測驗達及格標準。未通過       |
|         | 總測驗之學生不得申請學位考試。                            |
|         | 2. 本校 107 學年度(含)後入學學生須至本校網路教學平台修習「性別平等教育線上 |
|         | 訓練課程」,並通過課程總測驗。未通過總測驗之學生不得申請學位考試。          |
|         | 3. 本學程所列之核心課程為本校本學程支援之院系所(工學院、電機院及資訊學院)    |
|         | 所開設之課程,其他非支援院系所開設之與本學程核心課程名稱或內容相近之課        |
|         | 程,需徵得核心課程授課教師之紙本同意,且須於學程委員會議核備通過,始得承       |
|         | 認。   |
|         | 4. 其他未盡事宜,依據本學程「修業規章」辦理。                   |

## Graduate Degree Program of Robotics 2024 Academic Year

| Minimum         | 1 year   |
|-----------------|--|
| duration of     |  |
| study           |  |
| Minimum         | 24 credits: Including 12 core course credits (4 required courses and 1 elective course).   |
| number of       | During study, students shall take and pass the course of "Seminar" up to 4 semesters.  |
| credits         | *Indicates the required courses for this program   |
| Guidelines for  | * Sensing and Intelligent Systems (3 credits)  |
| required        | * Deep Learning and Practice (3 credits)   |
| (elective)      | * Machine Learning (3 credits)   |
| courses counted | * Mechatronics Design and Practice (3 credits)   |
| as graduation   | (1)Robotics (3 credits)  |
| requirements    | (2)Mobile Robots (3 credits)   |
|                 | (3)Self-Driving Cars (3 credits)   |
|                 | (4)Computer Vision (3 credits)   |
|                 | (5)Vehicular Vision System (3 credits)   |
|                 | (6)Principles of sensors and measurement systems (3 credits)   |
|                 | (7)Human Neuromechanics (3 credits)  |
|                 | (8)Nonlinear Control System (3 credits) or Nonlinear System Theory (3 credits)   |
|                 | (9)Deep Learning Labs(3 credits)   |
| Remarks         | 1. According to "National Chiao Tung University Academic Ethics Education Program<br>Implementation Rules": "Students should take courses on the "Center for Taiwan<br>Academic Research Ethics Education" platform and pass the required approval standard<br>for the final test before the end of the first semester after enrollment."  |
|                 | 2. Students who are enrolled in (and after) Academic Year 2018 shall take "Gender Equity Education Online Training Course" through the University's online learning platform and pass the final test. Students who fail the final test cannot apply for degree exam.   |
|                 | 3. The core curriculum presented in this program is offered by the colleges and departments of National Yang Ming Chiao Tung University (the College of Engineering, College of Electrical and Computer Engineering, and College of Computer Science) supported by this program. Other colleges and departments not supported by this program offering courses and programs bearing similar names and content to the program are required to obtain the written consent of the faculty members of the core curriculum of the program in hard copy, and are subject to the referencing filing and approval of the Academic Program Committee for recognition. |
|                 | 4. Matters not covered by this contract shall be settled will be executed in accordance with the "Regulations on Academic Studies for Master Program Students" for the Graduate Degree Program of Robotics.  |