### 電控工程研究所碩士班

111 學年度

| 最低修業年限     | 一年                                       |
|------------|--|
| 應修學分數      | 24 學分(不含論文研討及學位論文研究學分)                   |
| 應修(應選)課程及符 | 1.核心課程:                                  |
| 合畢業資格之修課相  | 線性系統理論、數位訊號處理、影像處理、嵌入式作業系統、電力電子、感測       |
| 關規定        | 與智慧系統、超大型積體電路系統設計、類比積體電路設計、功率積體電路設       |
|            | 計、檢測與估計理論、隨機程序(隨機過程)                     |
|            | 2.畢業學分除上列核心課程 6 學分外,須另外修本所課程至少 9 學分,共計修本 |
|            | 所課程至少 15 學分。                             |
|            | 3.碩一至碩二每學期必修論文研討及學位論文研究。                 |

### Master Degree of Institute of Electrical Control Engineering

Academic Year 111

| Minimum length of   | 1 year   |
|---------------------|--|
| schooling           |  |
| Required credits    | 24 credits (Does not include Seminar and Academic Dissertation Research courses)         |
| Course requirements | 1. Core Curriculum:  |
| and graduation      | Linear Systems Theory, Digital Signal Processing, Image Processing, Embedded             |
| relevant provisions | Operating System, Power Electronics, Sensing and Intelligent Systems, VLSI               |
|                     | System Design and Applications, Analog IC Design, Power Integrated Circuits              |
|                     | Design, Detection and Estimation, Stochastic Processes.                                  |
|                     | 2. 15 credits must consist of 6 credits in Core Curriculum and the other courses offered |
|                     | by ICE Department.   |
|                     | 3. Seminar and Academic Dissertation Research courses are required in each semester      |
|                     | of first and second year.  |

#### 電控工程研究所碩士班(輔所)

111 學年度

| 應修學分數    | 13 學分(含論文研討一學期)                       |
|----------|---------------------------------------|
| 應修(應選)課程 | 4 年內修習本所所開課程任選四門即可,惟該生已修過之課程若與本所所開課程同 |
|          | 性質,不得再修而將其算為輔所應修學分數內。                 |

# Master Degree of Institute of Electrical Control Engineering (Minor Program)

Academic Year 111

| Minimum Credits            | 13 (including Seminar course in 1 semester)  |  |
|----------------------------|--|--|
| Curriculum and Regulations | Every graduate student enrolled in this program must complete at least twelve (12) credit hours of technical courses (course code ICNXXXX) within four years.  But the completed credit-hours of technical course (ICNXXXX) similar to the other completed course (not ICNXXXX) will be neglected. |  |

## 電控工程研究所博士班

#### 111 學年度

| 最低修業年限     | 二年  |
|------------|---|
| 應修學分數      | 18 學分(不含論文研討及學位論文研究學分)                    |
| 直升博士生      | 30 學分                                     |
| 應修學分數      |   |
| 應修(應選)課程及符 | 1.核心課程:                                   |
| 合畢業資格之修課相  | 線性系統理論、數位訊號處理、影像處理、嵌入式作業系統、電力電子、感測        |
| 關規定        | 與智慧系統、超大型積體電路系統設計、類比積體電路設計、功率積體電路設        |
|            | 計、檢測與估計理論、隨機程序(隨機過程)。                     |
|            | 2. 畢業學分包含上列核心課程 6 學分外,須另修本所開設課程至少 6 學分,共計 |
|            | 修本所課程至少 12 學分。                            |
|            | 3.博一至博三每學期必修論文研討1學分(共6學分)。                |
|            | 4. 畢業前必須選修學位論文研究 6 學期(共 6 學分)且選修通過。       |

# PhD Degree of Institute of Electrical Control Engineering Academic Year 111

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|--|---|--|
| Minimum length of  | 2 year  |  |
| schooling  |   |  |
| Required credits   | 18 credits (Does not include Seminar and Academic Dissertation Research courses)  |  |
| Required credits of<br>concurrent degree program<br>– master and PhD | 30 credits  |  |
| Course Requirements  | 1. Core curriculum: Linear System Theory, Digital Signal Processing, Image  |  |
| and Graduation   | Processing, Embedded Operating Systems, Power Electronics, Sensing and  |  |
| relevant provisions  | Intelligent Systems, VLSI System Design and Applications, Analog IC Design, Power Integrated Circuits Design, Detection and Estimation, Stochastic Processes. |  |
|  | 2. In addition to the core curriculums (6 credits) above, the graduation credits contain at least the other 6 credits from the curriculums in our institute.  |  |
|  | 3. In the first three years of PhD, student must earn 1 credit from the colloquium every semester (6 credits in total)  |  |
|  | 4. Before graduating, student must take the course of Academic Dissertation Research in six semesters and pass it (6 credits in total)                        |  |