

115學年度課程規劃表

電子工程系

日間部碩士班

| 第一學年(115) | | | | | 第二學年(116) | | | | | | |
|------------------|----------------|-----|----|-----|-----------|------------------|--------------|-----|----|-----|----|
| | 科目 | 上學期 | | 下學期 | | | 科目 | 上學期 | | 下學期 | |
| | | 學分 | 時數 | 學分 | 時數 | | | 學分 | 時數 | 學分 | 時數 |
| 院 必 修 | 專題討論 | 2 | 2 | 2 | 2 | 院 必 修 | | | | | |
| | 研究方法與論文寫作 | 2 | 2 | | | | | | | | |
| | 小計 | 4 | 4 | 2 | 2 | | 小計 | 0 | 0 | 0 | 0 |
| 專 業 必 修 | | | | | | 專 業 必 修 | 論文 | 3 | 3 | 3 | 3 |
| | | | | | | | | | | | |
| | 小計 | 0 | 0 | 0 | 0 | | 小計 | 3 | 3 | 3 | 3 |
| 專 業 選 修 | AI機器學習語言 | 3 | | 3 | | 專 業 選 修 | ESD佈局設計 | 3 | | 3 | |
| | 數位積體電路佈局設計 | 3 | | 3 | | | 類比積體電路佈局設計 | 3 | | 3 | |
| | 半導體製程整合技術 | 3 | | 3 | | | 半導體封裝技術 | 3 | | 3 | |
| | 積體電路量測技術 | 3 | | 3 | | | 積體電路可靠度分析 | 3 | | 3 | |
| | 半導體元件物理 | 3 | | 3 | | | 相鎖迴路積體電路佈局設計 | 3 | | 3 | |
| | 功率積體電路 | 3 | | 3 | | | 混合積體電路佈局設計 | 3 | | 3 | |
| | 半導體功率元件 | 3 | | 3 | | | 半導體設備機台設計 | 3 | | 3 | |
| | 電磁理論 | 3 | | 3 | | | 系統晶片設計實務 | 3 | | 3 | |
| | 射頻電路設計 | 3 | | 3 | | | 機器視覺實務 | 3 | | 3 | |
| | 微波工程 | 3 | | 3 | | | 射頻積體電路設計 | 3 | | 3 | |
| | 微帶天線設計 | 3 | | 3 | | | 微波電路設計 | 3 | | 3 | |
| | 數位通訊理論 | 3 | | 3 | | | 行動天線設計與量測 | 3 | | 3 | |
| | Zigbee無線感測網路系統 | 3 | | 3 | | | 個人無線通訊系統 | 3 | | 3 | |
| | TCL/TK自動佈局設計 | 3 | | 3 | | | 新世代封裝測試技術 | 3 | | 3 | |
| AI封裝檢測實務 | 3 | | 3 | | 人工智慧觸控技術 | 3 | | 3 | | | |

| 【科目類別】 | | 學分 | 時數 |
|--------|------|----|----|
| 專業科目 | 院必修 | 6 | 6 |
| | 專業必修 | 6 | 6 |
| | 專業選修 | 18 | 18 |
| 合計 | | 30 | 30 |

【注意事項】

1. 最低畢業學分：30學分，含必修：12，選修18學分(本所至少9學分，其餘可跨所)。
2. 每學期修習學分：下限為1學分。
3. 「論文」必修6學分，俟口試通過後，一次給予6學分。
4. 表列專業選修課程，得依實際情況逕行調整。
5. 本表建立於115年03月17日。



明新科技大學電子系
課程教學小組

電子工程系 主任 張承勛

半導體學院 院長 陳啟文

MUST Curriculum Planning for Graduate Students for Academic Year 2026-2027,
Institute of Electronic Engineering

| 1 st year(115) | | | | | 2 nd year(116) | | | | | | | |
|----------------------------------|---|--------------|----------|--------------------------|---------------------------|----------------------------|---|--------------|----------|--------------------------|----------|----------|
| | Course | 1st semester | | 2 nd semester | | | Course | 1st semester | | 2 nd semester | | |
| | | Cr. | hr. | Cr. | hr. | | | Cr. | hr. | Cr. | hr. | |
| MUST Core Required Courses | Seminar | 2 | 2 | 2 | 2 | MUST Core Required Courses | | | | | | |
| | Research Methodo and Thesis Writing | 2 | 2 | | | | | | | | | |
| | Subtotal | 4 | 4 | 2 | 2 | | Subtotal | 0 | 0 | 0 | 0 | 0 |
| Compulsory Courses | | | | | | Compulsory Courses | Thesis | 3 | 3 | 3 | 3 | |
| | Subtotal | 0 | 0 | 0 | 0 | | Subtotal | 3 | 3 | 3 | 3 | |
| Elective Courses | AI Machine Learning Language | 3 | | 3 | | Elective Courses | ESD Layout Designs | 3 | | 3 | | |
| | Digital Integrated Circuit Layout Designs | 3 | | 3 | | | Analog Integrated Circuit Layout Designs | 3 | | 3 | | |
| | Semiconductor Manufacturing and Integration Technique | 3 | | 3 | | | Semiconductor Assembly Techniques | 3 | | 3 | | |
| | Integrated Circuits Measurement Techniques | 3 | | 3 | | | Integrated circuit reliability analysis | 3 | | 3 | | |
| | Semiconductor Physics | 3 | | 3 | | | PLL Integrated Circuit Layout Desings | 3 | | 3 | | |
| | Power Integrated Circuits Design | 3 | | 3 | | | Mixed Mode Integrated Circuit Designs | 3 | | 3 | | |
| | Semiconductor Power Discrete Device | 3 | | 3 | | | Design of Semiconductor Production Equipments | 3 | | 3 | | |
| | Electromagnetic Theory | 3 | | 3 | | | System on Chip Design Practice | 3 | | 3 | | |
| | RF Circuits Design | 3 | | 3 | | | Practice of Machine Vision | 3 | | 3 | | |
| | Microwave Engineering | 3 | | 3 | | | RF IC Design | 3 | | 3 | | |
| | Microstrip Antenna Design | 3 | | 3 | | | Microwave Circuits Design | 3 | | 3 | | |
| | Digital Communication Theory | 3 | | 3 | | | Mobile Antenna Design and Measurement | 3 | | 3 | | |
| | Zigbee Wireless Sensor Networks | 3 | | 3 | | | Personal Wireless Communication System | 3 | | 3 | | |
| | TCL/TK Auto-Layout Designs | 3 | | 3 | | | New-era Package and Testing Technology | 3 | | 3 | | |
| AI Package and Testing Practices | 3 | | 3 | | AI Touch Technology | 3 | | 3 | | | | |

Cr./hr.=Credit/hour

Remarks:

1. Minimum graduation credits: 30 credits; compulsory credits: 12 credits, electives: 18 credits (elective credits include inter-departmental elective credits).
2. Study credits per semester: the lower limit is 1 credit.
3. All 6 thesis credits will be granted only after passing the oral exam.
4. The elective courses are subject to change if necessary.
5. This form created in 115.03.17



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電子工程系 主任 張丞勛

半導體學院 院長 陳啟文