

114學年度課程規劃表

## 電子工程系

日間部四技國際學生產學合作專班

| 第一學年(114)        |            |     |    |     | 第二學年(115) |                  |              |     |    | 第三學年(116) |                  |             |            |     |    |     |    |
|------------------|------------|-----|----|-----|-----------|------------------|--------------|-----|----|-----------|------------------|-------------|------------|-----|----|-----|----|
| 校<br>必<br>修      | 科目         | 上學期 |    | 下學期 |           | 校<br>必<br>修      | 科目           | 上學期 |    | 下學期       |                  | 校<br>必<br>修 | 科目         | 上學期 |    | 下學期 |    |
|                  |            | 學分  | 時數 | 學分  | 時數        |                  |              | 學分  | 時數 | 學分        | 時數               |             |            | 學分  | 時數 | 學分  | 時數 |
| 校<br>必<br>修      | 體育         | 1   | 2  | 1   | 2         | 校<br>必<br>修      |              |     |    |           | 校<br>必<br>修      | 台灣社會        | 2          | 2   |    |     |    |
|                  | 漢語拼音發音練習   | 1   | 2  |     |           |                  |              |     |    |           |                  | 台灣藝術        |            |     | 2  | 2   |    |
|                  | 華語輔導       | 0   | 5  |     |           |                  |              |     |    |           |                  | 科技英文(三)(四)  | 2          | 2   | 2  | 2   |    |
|                  | 華語聽力練習     | 1   | 2  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 華語會話練習     | 1   | 2  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 華語閱讀與理解    | 1   | 2  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 華語寫作練習     | 1   | 2  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 華人文學       |     |    | 3   | 3         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 華人文化       |     |    | 3   | 3         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 台灣生活與法律    |     |    | 2   | 2         |                  |              |     |    |           |                  |             |            |     |    |     |    |
| 院<br>必<br>修      | 台灣文化       |     |    | 2   | 2         | 院<br>必<br>修      |              |     |    |           | 院<br>必<br>修      |             |            |     |    |     |    |
|                  | 科技英文(一)(二) | 2   | 2  | 2   | 2         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 小計         | 8   | 19 | 13  | 14        |                  | 小計           | 0   | 0  | 0         |                  | 0           | 小計         | 4   | 4  | 4   | 4  |
|                  | 物理與物理實驗    |     |    | 2   | 2         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 程式設計       |     |    | 3   | 3         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 微積分        | 3   | 3  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 小計         | 3   | 3  | 5   | 5         |                  | 小計           | 0   | 0  | 0         |                  | 0           | 小計         | 0   | 0  | 0   | 0  |
|                  | 基本電學實習     | 2   | 2  |     |           |                  | 產業實務實習(一)(二) | 9   | 9  | 9         |                  | 9           | 電子學(一)(二)  | 3   | 3  | 3   | 3  |
|                  | 數位邏輯設計     | 3   | 3  |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 電路學(一)(二)  | 3   | 3  | 3   | 3         |                  |              |     |    |           |                  |             |            |     |    |     |    |
| 專<br>業<br>必<br>修 | 數位系統設計     |     |    | 3   | 3         | 專<br>業<br>必<br>修 |              |     |    |           | 專<br>業<br>必<br>修 |             |            |     |    |     |    |
|                  | 電子電路實習     |     |    | 2   | 2         |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  | 小計         | 8   | 8  | 8   | 8         |                  | 小計           | 9   | 9  | 9         |                  | 9           | 小計         | 3   | 3  | 3   | 3  |
|                  |            |     |    |     |           |                  | 積體電路封裝導論     | 3   | 3  |           |                  |             | 積體電路測試導論   | 3   | 3  |     |    |
|                  |            |     |    |     |           |                  | 輪形機器人基礎實務    | 3   | 3  |           |                  |             | 工程倫理       | 2   | 2  |     |    |
|                  |            |     |    |     |           |                  | 類比電子實務       | 3   | 3  |           |                  |             | 電路程式模擬實務   | 3   | 3  |     |    |
|                  |            |     |    |     |           |                  | 可程式規劃元件實務    |     |    | 3         |                  | 3           | 積體電路工程     | 3   | 3  |     |    |
|                  |            |     |    |     |           |                  | 積體電路設計概論     |     |    | 3         |                  | 3           | 單晶片系統應用實務  | 3   | 3  |     |    |
|                  |            |     |    |     |           |                  | 單晶片微電腦實務     |     |    | 3         |                  | 3           | 圖控程式設計     | 3   | 3  |     |    |
|                  |            |     |    |     |           |                  | 機器人組裝控制實務    |     |    | 3         |                  | 3           | 電磁學        | 3   | 3  |     |    |
| 專<br>業<br>選<br>修 |            |     |    |     |           | 專<br>業<br>選<br>修 | 積體電路封裝實務     |     |    | 3         | 3                | 數位電子證照認證    | 3          | 3   |    |     |    |
|                  |            |     |    |     |           |                  | 工程數學(二)      |     |    | 3         | 3                | JAVA程式設計    | 3          | 3   |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 微電腦介面實務     | 3          | 3   |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 積體電路佈局實務    |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 行動通訊應用實務    |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 機器學習語言實務    |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 半導體製程技術     |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 射頻電路設計      |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | FPGA設計實務    |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  | 機器人應用實務     |            |     | 3  | 3   |    |
| 專<br>業<br>選<br>修 |            |     |    |     |           | 專<br>業<br>選<br>修 |              |     |    |           | 專<br>業<br>選<br>修 | 自動量測設計實務    |            |     | 3  | 3   |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             | Python程式設計 |     |    | 3   | 3  |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             | 通訊系統       |     |    | 3   | 3  |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             | 通訊系統實務     |     |    | 3   | 3  |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             | 積體電路測試實務   |     |    | 3   | 3  |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |
|                  |            |     |    |     |           |                  |              |     |    |           |                  |             |            |     |    |     |    |

| 第四學年(117)        |              |     |    |     |    |
|------------------|--------------|-----|----|-----|----|
|                  | 科目           | 上學期 |    | 下學期 |    |
|                  |              | 學分  | 時數 | 學分  | 時數 |
| 校<br>必<br>修      |              |     |    |     |    |
|                  |              |     |    |     |    |
|                  | 小計           | 0   | 0  | 0   | 0  |
| 院<br>必<br>修      |              |     |    |     |    |
|                  |              |     |    |     |    |
|                  | 小計           | 0   | 0  | 0   | 0  |
| 專<br>業<br>必<br>修 |              |     |    |     |    |
|                  |              |     |    |     |    |
|                  | 小計           | 0   | 0  | 0   | 0  |
| 專<br>業<br>選<br>修 | 產業實務實習(三)(四) | 9   | 9  | 9   | 9  |
|                  | 積體電路系統整合測試   | 3   | 3  |     |    |
|                  | 物聯網應用實務      | 3   | 3  |     |    |
|                  | 數位通訊實務       | 3   | 3  |     |    |
|                  | 積體電路加速壽命測試技術 | 3   | 3  |     |    |

## 【科目類別】

通識科目(分類通識):校必修

共同科目(體育):校必修

專業科目:院必修、專業必修、專業選修

| 【科目類別】    |      |     |     |
|-----------|------|-----|-----|
| 通識科目、共同科目 | 校必修  | 學分  | 時數  |
|           | 29   | 41  |     |
| 專業科目      | 院必修  | 學分  | 時數  |
|           | 8    | 8   |     |
|           | 專業必修 | 學分  | 時數  |
|           | 40   | 40  |     |
|           | 專業選修 | 學分  | 時數  |
|           | 51   | 51  |     |
| 合計        |      | 128 | 140 |

## 【注意事項】

1. 最低畢業學分:128 學分,含必修:77,選修51學分(本系至少39學分,其餘可跨系)。
2. 學生需修習華語輔導課程(0學分5小時),並於第一學年上學期實施。
3. 表列專業選修課程,得依實際情況進行調整。
4. 校外實習課程,請依相關實施要點辦理;校外實習課程:產業實務實習(一)(二)(三)(四)。
5. 校外產業實務實習(一)至(四)課程,實際實習時數每週32小時。
6. 本表建立於114年\_2\_月\_20\_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  
院長張合



**MUST Curriculum Planning for Undergraduate Students of Academic Year 2025-2029,  
Department of Electronics Engineering**

| Year                                 |                                         | 114      |     |          |     | Year                                 |                                     | 115      |     |          |     | Year                                 |                                        | 116      |     |          |     |
|--------------------------------------|-----------------------------------------|----------|-----|----------|-----|--------------------------------------|-------------------------------------|----------|-----|----------|-----|--------------------------------------|----------------------------------------|----------|-----|----------|-----|
|                                      | Course                                  | SEP 2025 |     | FEB 2026 |     |                                      | Course                              | SEP 2026 |     | FEB 2027 |     |                                      | Course                                 | SEP 2027 |     | FEB 2028 |     |
|                                      |                                         | Cr.      | hr. | Cr.      | hr. |                                      |                                     | Cr.      | hr. | Cr.      | hr. |                                      |                                        | Cr.      | hr. | Cr.      | hr. |
| MUST Core Required Courses           | Physical Education                      | 1        | 2   | 1        | 2   | MUST Core Required Courses           |                                     |          |     |          |     | MUST Core Required Courses           | Taiwanese Society                      | 2        | 2   |          |     |
|                                      | Chinese Pinyin & Pronunciation Practice | 1        | 2   |          |     |                                      |                                     |          |     |          |     |                                      | Taiwanese Art                          |          |     | 2        | 2   |
|                                      | Chinese tutor                           | 0        | 5   |          |     |                                      |                                     |          |     |          |     |                                      | Technology English (III) (IV)          | 2        | 2   | 2        | 2   |
|                                      | Chinese Listening                       | 1        | 2   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Chinese Daily Speaking                  | 1        | 2   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Chinese Reading                         | 1        | 2   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Chinese Writing                         | 1        | 2   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Chinese Literature                      |          |     | 3        | 3   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Chinese Culture                         |          |     | 3        | 3   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Taiwanese Classified General Education  |          |     | 2        | 2   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Taiwanese Culture                       |          |     | 2        | 2   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Technology English (I) (II)             | 2        | 2   | 2        | 2   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Subtotal                                | 8        | 19  | 13       | 14  |                                      | Subtotal                            | 0        | 0   | 0        | 0   |                                      | Subtotal                               | 4        | 4   | 4        | 4   |
| School Professional Required Courses | Physics & Physics Lab                   |          |     | 2        | 2   | School Professional Required Courses |                                     |          |     |          |     | School Professional Required Courses |                                        |          |     |          |     |
|                                      | Programming                             |          |     | 3        | 3   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Calculus                                | 3        | 3   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Subtotal                                | 3        | 3   | 5        | 5   |                                      | Subtotal                            | 0        | 0   | 0        | 0   |                                      | Subtotal                               | 0        | 0   | 0        | 0   |
| compulsory courses                   | Basic Electricity and Experiment        | 2        | 2   |          |     | compulsory courses                   | Industrial Practice (I) (II)        | 9        | 9   | 9        | 9   | compulsory courses                   | Electronics (I) (II)                   | 3        | 3   | 3        | 3   |
|                                      | Digital Logic Design                    | 3        | 3   |          |     |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Basic Circuit Theory (I) (II)           | 3        | 3   | 3        | 3   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Digital System Design                   |          |     | 3        | 3   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Electronic Circuits Lab                 |          |     | 2        | 2   |                                      |                                     |          |     |          |     |                                      |                                        |          |     |          |     |
|                                      | Subtotal                                | 8        | 8   | 8        | 8   |                                      | Subtotal                            | 9        | 9   | 9        | 9   |                                      | Subtotal                               | 3        | 3   | 3        | 3   |
| Elective Courses                     |                                         |          |     |          |     | Elective Courses                     | Introduction to IC Package          | 3        | 3   |          |     | Elective Courses                     | Cloud IC Testing Simulation Practice   | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | Basic Wheel Robot Practice          | 3        | 3   |          |     |                                      | Ethics for Engineers                   | 2        | 2   |          |     |
|                                      |                                         |          |     |          |     |                                      | Analog Electronic Lab               | 3        | 3   |          |     |                                      | Circuit Simulation Practice            | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | PLD Lab                             |          |     | 3        | 3   |                                      | Integrated Circuits Engineering        | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | Introduction to IC Design           |          |     | 3        | 3   |                                      | Single-Chip Microcontroller System Lab | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | Single-chip Micro-computer Practice |          |     | 3        | 3   |                                      | Labview Programming Design             | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | Robot Assembly Control Practice     |          |     | 3        | 3   |                                      | Electromagnetics                       | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | IC Package Practice                 |          |     | 3        | 3   |                                      | Certification of Digital Electronics   | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      | Engineering Mathematics (II)        |          |     | 3        | 3   |                                      | JAVA Programming                       | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Microcomputer Interface Practice       | 3        | 3   |          |     |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Digital IC Layout Practice             |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Mobile Communication Practice          |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Machine Learning Practice              |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Semiconductor Process Technology       |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | RF circuit design                      |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | FPGA Design Practice                   |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Robot Application Practice             |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Automatic Sense Design Practice        |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Python Practice                        |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Communication Systems                  |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Communication Systems Practice         |          |     | 3        | 3   |
|                                      |                                         |          |     |          |     |                                      |                                     |          |     |          |     |                                      | Integrated Circuit Testing Practice    |          |     | 3        | 3   |

| Year                                 |                                                | 117      |     |          |     |
|--------------------------------------|------------------------------------------------|----------|-----|----------|-----|
|                                      | Course                                         | SEP 2028 |     | FEB 2029 |     |
|                                      |                                                | Cr.      | hr. | Cr.      | hr. |
| MUST Core Required Courses           |                                                |          |     |          |     |
|                                      | Subtotal                                       | 0        | 0   | 0        | 0   |
| School Professional Required Courses |                                                |          |     |          |     |
|                                      | Subtotal                                       | 0        | 0   | 0        | 0   |
| compulsory courses                   |                                                |          |     |          |     |
|                                      |                                                |          |     |          |     |
|                                      |                                                |          |     |          |     |
|                                      | Subtotal                                       | 0        | 0   | 0        | 0   |
| Elective Courses                     | Industrial Practice (III) (IV)                 | 9        | 9   | 9        | 9   |
|                                      | IC Testing Practice                            | 3        | 3   |          |     |
|                                      | IoT Application Practice                       | 3        | 3   |          |     |
|                                      | Digital Communication Practice                 | 3        | 3   |          |     |
|                                      | Accelerated Life Testing on Integrated Circuit | 3        | 3   |          |     |

Cr./hr. =Credit/hour

Remarks:

1. Minimum credits required for graduation: 128 credits including 77 compulsory credits, and at least 51 elective credits(including the interdepartmental elective credits).
2. Undergraduate students shall take 5-hour chinese tutoring courses (0 credits) in the first semester of the first academic year.
3. The elective courses listed in the tables are subject to adaptation when necessary.
4. For off-campus internship courses, please follow the relevant implementation regulations.  
Off-campus internship courses: Industrial practical internship (1) (2) (3) (4).
5. The actual internship hours for the off-campus internship program are 32 hours per week.
6. This form created in 114.2.20.

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  
院長張合

