

112學年度日間部 資訊工程系 四年制產學合作學士海外青年技術班課程規劃表

| 學年度 | | 112 | | | | 學年度 | | 113 | | | | 學年度 | | 114 | | | | | |
|------|----------|----------|----|----------|----|------|-------------|----------|----|----------|----|----------|-----------|----------|-----------|----------|----|---|---|
| 科目 | | SEP 2023 | | FEB 2024 | | 科目 | | SEP 2024 | | FEB 2025 | | 科目 | | SEP 2025 | | FEB 2026 | | | |
| | | 學分 | 時數 | 學分 | 時數 | | | 學分 | 時數 | 學分 | 時數 | | | 學分 | 時數 | 學分 | 時數 | | |
| 校必修 | 體育 | 1 | 2 | 1 | 2 | 校必修 | | | | | | 校必修 | 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 | | | | | | | | | | | | | | | | |
| | 華語輔導 | 0 | 5 | | | | | | | | | | | | | | | | |
| | 華人文學 | | | 3 | 3 | | | | | | | | | | | | | | |
| | 華人文化 | | | 3 | 3 | | | | | | | | | | | | | | |
| | 台灣生活與法律 | | | 2 | 2 | | | | | | | | | | | | | | |
| 台灣文化 | | | 2 | 2 | | | | | | | | | | | | | | | |
| 小計 | 6 | 17 | 11 | 12 | | | 0 | 0 | 0 | 0 | | | 小計 | 2 | 2 | 2 | 2 | | |
| 院必修 | 科技英文(一) | 2 | 2 | | | 院必修 | 科技英文(三) | 2 | 2 | | | 院必修 | | | | | | | |
| | 科技英文(二) | | | 2 | 2 | | 科技英文(四) | | | 2 | 2 | | | | | | | | |
| | 工程倫理 | | | 2 | 2 | | 小計 | 2 | 2 | 2 | 2 | | | | 小計 | 0 | 0 | 0 | 0 |
| 小計 | 2 | 2 | 4 | 4 | | | | | | | | | | | | | | | |
| 專業必修 | 計算機概論 | 3 | 3 | | | 專業必修 | 產業實務實習(一) | 6 | 6 | | | 專業必修 | 產業實務實習(三) | 6 | 6 | | | | |
| | 半導體產業概論 | 2 | 2 | | | | 產業實務實習(二) | | | 6 | 6 | | | | 產業實務實習(四) | | | 6 | 6 |
| | 智慧製造概論 | 2 | 2 | | | | 小計 | 6 | 6 | 6 | 6 | | | | 小計 | 6 | 6 | 6 | 6 |
| 小計 | 7 | 7 | 0 | 0 | | | | | | | | | | | | | | | |
| 專業選修 | 半導體製程概論 | | | 3 | 3 | 專業選修 | 電機學 | 3 | 3 | | | 專業選修 | 進階華語能力輔導 | 3 | 3 | | | | |
| | 機電整合概論 | | | 3 | 3 | | 可程式控制實務 | 3 | 3 | | | | | 電子封裝製程 | 3 | 3 | | | |
| | 機械製造概論 | | | 3 | 3 | | 資訊科技應用趨勢 | | | 3 | 3 | | | 物聯網系統概論 | 3 | 3 | | | |
| | 數位電路概論 | | | 3 | 3 | | 機電整合實務 | | | 3 | 3 | | | 程式設計應用 | | | 3 | 3 | |
| | | | | | | | 職場實習安全與專業倫理 | | | 3 | 3 | | | 人工智慧概論 | | | 3 | 3 | |
| | | | | | | | | | | | | 機聯網與智慧製造 | | | 3 | 3 | | | |

| 學年度 | | 115 | | | |
|---------|-----------|----------|----|----------|----|
| 科目 | | SEP 2026 | | FEB 2027 | |
| | | 學分 | 時數 | 學分 | 時數 |
| 校必修 | 小計 | 0 | 0 | 0 | 0 |
| | | | | | |
| 院必修 | 小計 | 0 | 0 | 0 | 0 |
| | | | | | |
| 專業必修 | 產業實務實習(五) | 6 | 6 | | |
| | 產業實務實習(六) | | | 6 | 6 |
| 小計 | 6 | 6 | 6 | 6 | |
| 專業選修 | 自動控制 | 3 | 3 | | |
| | 物聯網系統設計 | 3 | 3 | | |
| | 物聯網安全 | 3 | 3 | | |
| | 辦公室軟體應用 | 2 | 2 | | |
| | APP程式設計 | | | 2 | 2 |
| | 深度學習 | | | 3 | 3 |
| 多媒體應用 | | | 3 | 3 | |
| 資料庫系統概論 | | | 3 | 3 | |

| 項目 | 學分 | 時數 |
|------|-----|-----|
| 校必修 | 21 | 33 |
| 院必修 | 10 | 10 |
| 專業必修 | 43 | 43 |
| 專業選修 | 54 | 54 |
| 合計 | 128 | 140 |

科目類別：
 共同科目：校必修
 通識科目：分類通識
 專業科目：院必修、專業必修、專業選修

- 注意事項：
1. 最低畢業學分：128學分；必修學分：74學分
 選修學分：54學分（選修學分含跨系選修學分）
 2. 學生應修習華語輔導課程(0學分5小時)，並於第一學年上學期實施。
 3. 本系允許跨系選修學分，為本系專業選修學分不得低於42學分。
 4. 校外實習課程：產業實務實習(一)(二)(三)(四)(五)(六)。
 5. 表列選修課程僅供參考，依實際狀況調整。
 6. 中五學制學生以同等學力入學後，應在規定之修業年內內，增加其應修之畢業學分數12學分。

| 專業選修課程開課規劃 | |
|------------|----|
| 學期 | 時數 |
| 第一學年第一學期 | 0 |
| 第一學年第二學期 | 12 |
| 第二學年第一學期 | 6 |
| 第二學年第二學期 | 6 |
| 第三學年第一學期 | 6 |
| 第三學年第二學期 | 6 |
| 第四學年第一學期 | 9 |
| 第四學年第二學期 | 9 |
| 開課時數總計 | 54 |

資工系課務規劃委員會

資工系主任 陳美支

工程學院院長 劉崇治

| MUST Curriculum Planning for Undergraduate Students of Academic Year 2023-2027, | | | | | | | | | | | | | | | | | | |
|---|--|-----|-----|-----|-----|--------------------------------------|-----------------------------|-----|-----|-----|----------------------------|--------------------------------------|---|--|-----|-----|-----|---|
| Year | Course | 112 | | | | Year | Course | 113 | | | | Year | Course | 114 | | | | |
| | | 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 Listening | 1 | 2 | | | | | | | | | | | | | | | |
| | Chinese Daily Speaking | 1 | 2 | | | | | | | | | | | | | | | |
| | Chinese Reading | 1 | 2 | | | | | | | | | | | | | | | |
| | Chinese Writing | 1 | 2 | | | | | | | | | | | | | | | |
| | Chinese Tutor | 0 | 5 | | | | | | | | | | | | | | | |
| | Chinese Literature | | | 3 | 3 | | | | | | | | | | | | | |
| | Chinese Culture | | | 3 | 3 | | | | | | | | | | | | | |
| | Taiwanese Life and Laws | | | 2 | 2 | | | | | | | | | | | | | |
| Taiwanese Culture | | | 2 | 2 | | | | | | | | | | | | | | |
| Subtotal | | 6 | 17 | 11 | 12 | | | 0 | 0 | 0 | 0 | | | 2 | 2 | 2 | 2 | |
| School Professional Required Courses | Technical English(I) | 2 | 2 | | | School Professional Required Courses | Technical English(III) | 2 | 2 | | | School Professional Required Courses | | | | | | |
| | Technical English(II) | | | 2 | 2 | | | | | | | | | | | | | |
| | Ethics for Engineers | | | 2 | 2 | | | | | | | | | | | | | |
| | Subtotal | 2 | 2 | 4 | 4 | | | 2 | 2 | 2 | 2 | | | 0 | 0 | 0 | 0 | 0 |
| compulsory courses | Introduction to Computer Science | 3 | 3 | | | compulsory courses | Lab of Property Practice(I) | 6 | 6 | | | compulsory courses | Lab of Property Practice(III) | 6 | 6 | | | |
| | Introduction to Semiconductor Industry | 2 | 2 | | | | | | | | | | | Lab of Property Practice(IV) | | | 6 | 6 |
| | Introduction to Smart Manufacturing | 2 | 2 | | | | | | | | | | | | | | | |
| | Subtotal | 7 | 7 | 0 | 0 | | | 6 | 6 | 6 | 6 | | | 6 | 6 | 6 | 6 | 6 |
| Elective Courses | Introduction to Semiconductor Process | | | 3 | 3 | Elective Courses | Electrical Engineering | 3 | 3 | | | Elective Courses | Advanced Chinese Proficiency Counseling | 3 | 3 | | | |
| | Introduction to Mechatronics | | | 3 | 3 | | | | | | | | | Electronic Packaging Process | 3 | 3 | | |
| | Introduction to Mechanical Manufacturing | | | 3 | 3 | | | | | 3 | 3 | | | Introduction to IoT Systems | 3 | 3 | | |
| | Introduction to Digital Circuits | | | 3 | 3 | | | | | 3 | 3 | | | Programming Application | | | 3 | 3 |
| | | | | | | | | | | | | | | Introduction to Artificial Intelligence | | | 3 | 3 |
| | | | | | | | | | | | | | | Internet of Machines and Smart Manufacturing | | | 3 | 3 |

| Year | Course | 115 | | | |
|--------------------------------------|----------------------------------|-----|-----|-----|-----|
| | | Cr. | hr. | Cr. | hr. |
| MUST Core Required Courses | | | | | |
| | Subtotal | 0 | 0 | 0 | 0 |
| School Professional Required Courses | | | | | |
| | Subtotal | 0 | 0 | 0 | 0 |
| compulsory courses | Lab of Property Practice(V) | 6 | 6 | | |
| | Lab of Property Practice(VI) | | | 6 | 6 |
| | Subtotal | 0 | 0 | 0 | 0 |
| Elective Courses | Automatic Control | 3 | 3 | | |
| | IoT System Design | 3 | 3 | | |
| | IoT Security | 3 | 3 | | |
| | Office software application | 2 | 2 | | |
| | APP Programming | | | 2 | 2 |
| | Deep learning | | | 3 | 3 |
| | Multimedia Application | | | 3 | 3 |
| | Introduction to Database Systems | | | 3 | 3 |

Cr./hr. -Credit/hour

Remarks:

1. Minimum credits required for graduation: 128 credits including 74 compulsory credits, and at least 54 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. Inter-departmental elective credits are transferable. Professional elective course credits shall not be fewer than 42.
4. Off-campus Internship courses contain Lab of Property Practice (I)(II)(III)(IV)(V) and (VI).
5. The elective courses listed in the tables are subject to adaptation when necessary.
6. After entering the Secondary 5 school system with the same academic ability, students should increase their required graduation credits by 12 credits within the prescribed length of study.

資工系課務規劃委員會

資工系主任陳美支

工程學院院長劉崇治