# 中華科技大學四技進修部電機與資訊工程系課程規劃表(113學年度入學)

113年4月1日112學年度第2學期第1次系課程發展委員會通過
113年4月9日112學年度第2學期第1次院課程發展委員會通過
113年4月29日112學年度第2學期第1次校課程發展委員會通過

| | 第一學年/First Academic Year | | | | | 第二學年/Second Academic Year | | | | | 第三學年/Third Academic Year | | | | | 第四學年/Forth Academic Year | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 科目/Course Title | 第一學期 First Semester 學分 Credits | 第一學期 First Semester 時數 Hours | 第二學期 Second Semester 學分 Credits | 第二學期 Second Semester 時數 Hours | 科目/Course Title | 第一學期 First Semester 學分 Credits | 第一學期 First Semester 時數 Hours | 第二學期 Second Semester 學分 Credits | 第二學期 Second Semester 時數 Hours | 科目/Course Title | 第一學期 First Semester 學分 Credits | 第一學期 First Semester 時數 Hours | 第二學期 Second Semester 學分 Credits | 第二學期 Second Semester 時數 Hours | 科目/Course Title | 第一學期 First Semester 學分 Credits | 第一學期 First Semester 時數 Hours | 第二學期 Second Semester 學分 Credits | 第二學期 Second Semester 時數 Hours | 總學分 Total Credits | 總時數 Total Hours |
| **學校必修 (通識科目)** Courses Required by the University | 通識課程(一)/General Courses(I) | | | 2 | 2 | 通識課程(二)/General Courses(II) | 2 | 2 | | | 通識課程(四)/General Courses(IV) | 2 | 2 | | | | | | | | 18 | 18 |
| | 中文寫作與應用(一)(二)/Chinese Writing and Application(I)(II) | 2 | 2 | 2 | 2 | 通識課程(三)/General Courses(III) | | | 2 | 2 | 通識課程(五)/General Courses(V) | | | 2 | 2 | | | | | | | |
| | 體適能與健康促進(一)(二)/Physical Fitness and Health Pomotion(I)(II) | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | |
| | 小計/Subtotal | 4 | 4 | 6 | 6 | 小計/Subtotal | 2 | 2 | 2 | 2 | 小計/Subtotal | 2 | 2 | 2 | 2 | 小計/Subtotal | 0 | 0 | 0 | 0 | | |
| **學院必修 (專業科目)** Courses Required by the College | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| | 小計/Subtotal | 0 | 0 | 0 | 0 | 小計/Subtotal | 0 | 0 | 0 | 0 | 小計/Subtotal | 0 | 0 | 0 | 0 | 小計/Subtotal | 0 | 0 | 0 | 0 | | |
| **學系必修 (專業科目)** Courses Required by the Department | 基礎數學/ Elementary Mathematics | 3 | 3 | | | 工程數學/Engineering Mathematics | 3 | 3 | | | 專題製作(一)/ Project Study (I) | | | 2 | 2 | 專題製作(二)/ Project Study (II) | 2 | 2 | | | 54 | 54 |
| | 數位邏輯/ Digital Logic | 2 | 2 | | | 電路學(一)(二)/ Basic Circuits (I) (II) | 3 | 3 | 3 | 3 | 電機機械/ Electric Machinery | 3 | 3 | | | | | | | | | |
| | 數位邏輯實習/ Digital Logic Practice | 3 | 3 | | | 電子學(一)(二)/ Electronics (I) (II) | 3 | 3 | 3 | 3 | 計算機網路/ Computer Network | 3 | 3 | | | | | | | | | |
| | 微積分/ Calculus | | | 3 | 3 | #計算機程式/ Computer Programming | 3 | 3 | | | #晶片設計導論/ Introduction to IC Chip Design | | | 3 | 3 | | | | | | | |
| | #計算機概論/ Basic Concepts of Computers | | | 3 | 3 | #微算機實務/ Microcomputer Practice | | | 3 | 3 | #微控制器實習/ Experiments for Microcontroller | 3 | 3 | | | | | | | | | |
| | #應用電子實習/Application of Electronic Practice | | | 3 | 3 | | | | | | | | | | | | | | | | | |
| | 小計/Subtotal | 8 | 8 | 9 | 9 | 小計/Subtotal | 12 | 12 | 9 | 9 | 小計/Subtotal | 9 | 9 | 5 | 5 | 小計/Subtotal | 2 | 2 | 0 | 0 | | |
| **選修科目** Elective Course — **校選修 (通識科目)** University Electives | | | | | | | | | | | 軍訓(一)(二)/Military Training(1)(2) | 2 | 2 | 2 | 2 | | | | | | 56 | 56 |
| **院選修 (專業科目)** College Electives | | | | | | | | | | | | | | | | | | | | | | |
| **學系選修** Department Electives | 應用物理/ Applied Physics | 3 | 3 | | | 電子電路實習/ Electronic Circuits Experiment | 3 | 3 | | | 信號與系統/ Signals and Systems | 3 | 3 | | | 電力系統/ Power System | 3 | 3 | | | | |
| | 基本電學實習/ Basic Electrical Laboratory | 3 | 3 | | | #多媒體介面實習/ Multimedia Interface Practice | 3 | 3 | | | 工業配電/ Industrial Power Distribution | 3 | 3 | | | 網路多媒體設計/ Network Multimedia Design | 3 | 3 | | | | |
| | 電機工程概論/ Introduction of Electrical Engineering | 3 | 3 | | | 電子商務概論/ Introduction to Electronic Commerce | 3 | 3 | | | 感測器原理與應用/ Sensors Principle and Application | 3 | 3 | | | #智慧型控制實務/ Intelligent Control Practice | 3 | 3 | | | | |
| | 工業安全/ Industrial Safety | 3 | 3 | | | 光電工程導論/ Introduction to Electro-Optical Engineering | 3 | 3 | | | 電腦繪圖/ Computer Graphics | 3 | 3 | | | 冷凍工程與設計/ Refrigeration Engineering and Design | 3 | 3 | | | | |
| | #視窗軟體應用/ Applications for Windows | | | 2 | 2 | 工業配電/ Industrial Electricity Distribution | 3 | 3 | | | 動畫設計/ Animation Design | 3 | 3 | | | #雛型設計實作專題/ Prototype Design and Practice | 3 | 3 | | | | |
| | 數位系統設計/ Digital System Design | | | 2 | 2 | 電路板設計概論/ Introduction of Circuit Board Design | | | 3 | 3 | 行動裝置程式設計/ Mobile Device Programming | 3 | 3 | | | #物聯網設計實務/ Practice of IoT Design | 3 | 3 | | | | |
| | #影像處理/ Image Processing | | | 2 | 2 | #物件導向程式設計/ Advanced Object-oriented Programming | | | 3 | 3 | PLC控制應用及實習/ PLC Controll and Applications Practic | 3 | 3 | | | 感測器原理與應用/ Sensors Principle and Application | 3 | 3 | | | | |
| | | | | | | 機率與統計/ Probability and Statistics | | | 3 | 3 | #網路資料庫設計與應用/ Web Database Design and Application | 3 | 3 | | | 智慧製造概論/ Introduction to Smart Manufacturing | 3 | 3 | | | | |
| | | | | | | #資料結構/ Data Structure | | | 3 | 3 | @室內配線/ Interior Wiring Work | 3 | 3 | | | 微處理器系統實驗/ Microprocessor System Experiment | 3 | 3 | | | | |
| | | | | | | 感測與轉換器/ Sensor and Converter Technology | | | 3 | 3 | 太陽能照明系統概論/ Introduction of Solar-powered Lighting Systems | 3 | 3 | | | 光纖通訊系統/ Optical Communication System | 3 | 3 | | | | |
| | | | | | | 綠色能源導論/ Introduction to Green Energy | | | 3 | 3 | 光電元件設計與實務/ Optoelectronic Devices Design and Practice | 3 | 3 | | | 職能訓練與知識創新管理/Function training and Knowledge innovation mana | 3 | 3 | | | | |
| | | | | | | #遊戲程式設計/ Game Program Design | | | 3 | 3 | 電力電子學/ Power Electronics | 3 | 3 | | | #人機介面應用技術/ The Applications of Human Machine Interface Technol | 3 | 3 | | | | |
| | | | | | | | | | | | 控制系統/ Control System | | | 3 | 3 | #晶片系統設計實務/ Chip System Design Implemation | 3 | 3 | | | | |
| | | | | | | | | | | | 通訊系統/Communication System | | | 3 | 3 | 自動化工程概論/ Introduction to Automated Engineering | 3 | 3 | | | | |
| | | | | | | | | | | | 馬達驅動器設計/ Motor Driver Design | | | 3 | 3 | #計算機程式應用/ Computer Programming for Applications | | | 3 | 3 | | |
| | | | | | | | | | | | 計算機結構/Computer Architecture | | | 3 | 3 | 半導體製程設備/ Semiconductor Process Equipment | | | 3 | 3 | | |
| | | | | | | | | | | | #嵌入式系統概論/ Embedded System Overview | | | 3 | 3 | 電力轉換器設計與應用/ Design and Applications of Power Converter | | | 3 | 3 | | |
| | | | | | | | | | | | #人機介面系統設計/ Human Machine Interface System Design | | | 3 | 3 | #物聯網整合系統實務/ Internet of Things Integration System Practice | | | 3 | 3 | | |
| | | | | | | | | | | | LCD平面顯示技術/ The Technology of LCD Flat Panel Display | | | 3 | 3 | #多媒體技術與應用/ Multimedia Technology and Application | | | 3 | 3 | | |
| | | | | | | | | | | | 網路安全/ Network Security | | | 3 | 3 | 空調工程與設計/ Air-Conditioning Engineering and Design | | | 3 | 3 | | |
| | | | | | | | | | | | 冷凍空調原理/ Principles of Refrigeration and Air-Conditioning | | | 3 | 3 | 光機電整合應用技術/ Application of Opto-Mechatronics | | | 3 | 3 | | |
| | | | | | | | | | | | #視窗程式設計/ Windows Programming | | | 3 | 3 | AOI視覺自動化技術/ AOI Automated Optical Inspection | | | 3 | 3 | | |
| | | | | | | | | | | | 無線通訊系統實務/The Applications of Wireless Communication System | | | 3 | 3 | 綠能照明科技/ Green Energy Lighting Technology | | | 3 | 3 | | |
| | | | | | | | | | | | #動態網頁設計實務/ Dynamic Website Programming | | | 3 | 3 | 綠色電能轉換技術/ Green Power Conversion Technology | | | 3 | 3 | | |
| | | | | | | | | | | | | | | | | 半導體檢測技術/ SemiconductorInspectionTtechnology | | | 3 | 3 | | |
| | | | | | | | | | | | | | | | | #行動智能控制與實務/ Mobile Intelligent Control and Practice | | | 3 | 3 | | |
| | | | | | | | | | | | | | | | | 高科技專利取得與攻防/ Patent Engineering for High-Technology | | | 3 | 3 | | |
| | | | | | | | | | | | | | | | | 機電整合實務/ Mechatronics Practice | | | 3 | 3 | | |
| | 建議選修/Recommended Elective | 3 | 3 | 2 | 2 | 建議選修/Recommended Elective | 3 | 3 | 6 | 6 | 建議選修/Recommended Elective | 6 | 6 | 9 | 9 | 建議選修/Recommended Elective | 12 | 12 | 15 | 15 | | |
| | 合計/Total | 15 | 15 | 17 | 17 | 合計/Total | 17 | 17 | 17 | 17 | 合計/Total | 17 | 17 | 16 | 16 | 合計/Total | 14 | 14 | 15 | 15 | 128 | 128 |

備註：

1.「#」電腦上機實習科目。「@」專業證照輔導課程。「◆」創新創意課程。「▲」產業實務導向共構課程。「★」職能專業課程。

2. 若本班人數或所開課程經第一階段選課後未達開班人數，學生得跨年級、跨系或跨院選修相關課程。

3. 當學期若開設計畫性課程，如就業學程課程等，系選修課程得以計畫性課程認列畢業選修學分數。

4. 學生選修外系課程將予承認為本系選修學分，全部總計不超過10學分(含本校所認可之外校課程、校選修科目)為原則。