# 中華科技大學四技日間部機械系動力機械組課程規劃表(112學年度入學)

112年4月24日111學年度第2學期第3次系課程發展委員會通過
112年4月26日111學年度第2學期第3次院課程發展委員會通過
112年5月1日111學年度第2學期第2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(三)/General Courses(III) | 2 | 2 | | | 通識課程(五)/General Courses(V) | 2 | 2 | | | | | | | | 20 | 20 |
| | 通識課程(二)/General Courses(II) | | | 2 | 2 | 通識課程(四)/General Courses(IV) | | | 2 | 2 | 通識課程(六)/General Courses(VI) | | | 2 | 2 | | | | | | | |
| | 中文寫作與應用(一)(二)/Chinese Writing and Application(I)(II) | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | |
| | 體適能與健康促進(一)(二)/Physical Fitness and Health Pomotion(I)(II) | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | |
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| | 小計/Subtotal | 6 | 6 | 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 | 職場英文(一)(二)/Workplace English I、Workplace English II | 2 | 2 | 2 | 2 | #程式設計/Computer Language Programming | 2 | 2 | / | / | 創新設計與專利/Innovative design and patent | 3 | 3 | / | / | | | | | | 22 | 22 |
| | 人工智慧概論/Artificial Intelligence | 2 | 2 | / | / | 綠能應用概論/Green Energy Technology | 3 | 3 | / | / | 產業發展趨勢/Industry development trend | / | / | 2 | 2 | | | | | | | |
| | #計算機概論/Basic Concepts of Computers | / | / | 3 | 3 | #繪圖與設計/computer graphic and design | | | 3 | 3 | | | | | | | | | | | | |
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| | 小計/Subtotal | 4 | 4 | 5 | 5 | 小計/Subtotal | 5 | 5 | 3 | | 小計/Subtotal | 3 | 3 | 2 | 2 | 小計/Subtotal | 0 | 0 | 0 | 0 | | |
| **學系必修 (專業科目)** Courses Required by the Department | @車輛噴塗技術一/Vehicle spray technology I | 3 | 3 | / | / | 車用電子學實習一/Workshop on Automotive Electronics I | 3 | 3 | / | / | 車輛檢測實務一/vehicle detecting practice | 3 | 3 | / | / | | | | | | 38 | 38 |
| | #@電腦繪圖(一)/Computer Graphics I | 3 | 3 | / | / | 車用電子學實習二/experiments of automotive electronics II | / | / | 3 | 3 | 專題製作(一)(二)/Project Study I、Project Study II | 2 | 2 | 2 | 2 | | | | | | | |
| | 動力機械概論/Introduction to Power Plants | 2 | 2 | / | / | 傳動系統實務/Basic practices of transmission system | / | / | 3 | 3 | @氣壓實習/The practice pneumatic | 3 | 3 | / | / | | | | | | | |
| | 電動車實務/Electric Vehicles | / | / | 2 | 2 | | | | | | 熱流量測實驗/Measuring techniques of thermal fluid | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | @機電整合與實習/Practice of Mechatronics | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | 車輛檢測實務二/Vehicle detection practice II | / | / | 3 | 3 | | | | | | | |
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| | 小計/Subtotal | 8 | 8 | 2 | 2 | 小計/Subtotal | 3 | 3 | 6 | 6 | 小計/Subtotal | 8 | 8 | 11 | 11 | 小計/Subtotal | 0 | 0 | 0 | 0 | | |
| **選修科目** Elective Course — **校選修 (通識科目)** University Electives | | | | | | | | | | | 軍訓(一)(二)/Military Training(I)(II) | 2 | 2 | 2 | 2 | | | | | | 48 | 48 |
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| **院選修 (專業科目)** College Electives | | | | | | | | | | | | | | | | 職場倫理workplace ethics | 3 | 3 | / | / | | |
| | | | | | | | | | | | | | | | | 建築之旅 architectural tour | 3 | 3 | / | / | | |
| | | | | | | | | | | | | | | | | 多媒體技術與應用 Multimedia Technology and Application | 3 | 3 | / | / | | |
| | | | | | | | | | | | | | | | | 智慧製造概論Introduction to Smart Manufacturing | 3 | 3 | / | / | | |
| | | | | | | | | | | | | | | | | 設計概論design concept | / | / | 3 | 3 | | |
| | | | | | | | | | | | | | | | | #資訊科技應用 Information Technology Application | / | / | 3 | 3 | | |
| | | | | | | | | | | | | | | | | 無人機應用概論Introduction to UAV Applications | / | / | 3 | 3 | | |
| | | | | | | | | | | | | | | | | 職場實務workplace practice | / | / | 3 | 3 | | |
| **學系選修** Department Electives | @車體板金實務/Autobody Repair practice | / | / | 3 | 3 | 引擎系統實務/Engine System Practice | 3 | 3 | / | / | 複合材料/Composite Materials | 3 | 3 | / | / | 校外實習(一)(二)/Extracurricular Internship(I)(II) | 9 | * | 9 | * | | |
| | @車輛噴塗技術二/Vehicle spray technology II | / | / | 3 | 3 | 快速成型加工與實習/Rapid Prototyping and Practise | 3 | 3 | / | / | 車輛服務與行銷實務一/The practical After-sales of automobile I | 3 | 3 | / | / | 成長實習/Growth Internship | 1 | * | 1 | * | | |
| | 綠色能源/Green Energy & Sustainable Development | / | / | 3 | 3 | *噴射發動機技術/Gas Turbine Engine | 3 | 3 | / | / | 動力載具系統實務/Practice of Power Carrier System | 3 | 3 | / | / | | | | | | | |
| | 車輛動力學vehicle dynamics | / | / | 3 | 3 | 車輛噴塗實務/Vehicle spraying practice | 3 | 3 | / | / | 自動控制/Automatic Control | 3 | 3 | / | / | | | | | | | |
| | 車輛動態機構模擬分析Simulation Analysis of Vehicle Dynamic Mechanism | / | / | 3 | 3 | 工程統計學/Engineering Statistics | 3 | 3 | / | / | 空氣污染與防治/Air Pollution and Prevention | 3 | 3 | / | / | | | | | | | |
| | | | | | | 氫能與燃料電池/An Introduction to Hydrogen energy and Fuel Cell Technology | 3 | 3 | / | / | 能源技術/Energy technology | 3 | 3 | / | / | | | | | | | |
| | | | | | | #程式語言及應用/Programming Languages and Applications | 3 | 3 | / | / | 感測器原理與應用/Theory and Applications of Sensor | 3 | 3 | / | / | | | | | | | |
| | | | | | | @車體板金檢定/Practices ofAutobody Repair Certification | 3 | 3 | / | / | 中古車鑑價/Mid-ancient car price | / | / | 3 | 3 | | | | | | | |
| | | | | | | 工廠管理/Industrial Management | / | / | 3 | 3 | ◆創意性工程設計/The Internet of Things | / | / | 3 | 3 | | | | | | | |
| | | | | | | 產品設計實務/Product Design Pratice | / | / | 3 | 3 | 車輛服務與行銷實務二/The practical After-sales of automobile II | / | / | 3 | 3 | | | | | | | |
| | | | | | | #電腦輔助工程設計/Computer-Aided Engineering Design | / | / | 3 | 3 | @氣壓檢定實務/Practical Pneumatics | / | / | 3 | 3 | | | | | | | |
| | | | | | | 材料接合技術/Material Joining Technology | / | / | 3 | 3 | 機械人原理與應用/An Introduction of Robot and Applications | / | / | 3 | 3 | | | | | | | |
| | | | | | | 節能減碳設計/Energy saving and carbon reduction design | / | / | 3 | 3 | 複合材料產品製作/Composite product production | / | / | 3 | 3 | | | | | | | |
| | | | | | | 精密量具與檢驗/Precision Measurement Tool and Machine Tool | / | / | 3 | 3 | 機械元件設計實務/Practical Design of Mechine Elements | / | / | 3 | 3 | | | | | | | |
| | | | | | | 機械振動技術/Mechanical Vibration Technology | / | / | 3 | 3 | 科技英文寫作/scientific English writing | / | / | 3 | 3 | | | | | | | |
| | | | | | | 變速箱原理/Transmission Principle | / | / | 3 | 3 | 磨潤設計/Grinding Design | / | / | 3 | 3 | | | | | | | |
| | | | | | | 氣液壓學/Pneumatics and Hydraulics | / | / | 3 | 3 | 電機機械/Electric Machinery | / | / | 3 | 3 | | | | | | | |
| | | | | | | 車輛鍍膜實務/Carbeauty | / | / | 3 | 3 | 先進汽車技術/Advanced Automotive Technology | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | 專利理論與實務/Patent theory and practice | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | 保修廠經營管理/Warranty factory management | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | 機械材料實驗/Mechanical Materials Laboratory | / | / | 3 | 3 | | | | | | | |
| | | | | | | | | | | | 中古車鑑價實務/The practice of price verification of ancient cars | / | / | 3 | 3 | | | | | | | |
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| | 建議選修/Recommended Elective | 0 | 0 | 6 | 6 | 建議選修/Recommended Elective | 6 | 6 | 6 | 6 | 建議選修/Recommended Elective | 6 | 6 | 6 | 6 | 建議選修/Recommended Elective | 9 | 9 | 9 | 9 | | |
| | 合計/Total | 18 | 18 | 19 | 19 | 合計/Total | 16 | 16 | 17 | 17 | 合計/Total | 19 | 19 | 21 | 21 | 合計/Total | 9 | 9 | 9 | 9 | 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. 通識課程(一)開設資訊探索與應用

3. 校畢業門檻為「校外實習」

4. 系就業核心證照建議取得
   (1)語言：多益225分以上
   (2)專業證照：符合系上認定之專業證照3張

5. 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。