

**中信科技大學 進修部**  
**二年制 冷凍空調與能源系 課程規劃表**  
 (適用115學年度入學)

CTBC University of Science and Technology  
 Curriculum of Department of Refrigeration Air Conditioning and Energy  
 for Two-Year Bachelor's Degree Program-Night Division (Effective from Fall 2026)

| 科目名稱<br>Subject                             |                                                                                        | 第一學年1st School Year        |                            | 第二學年2nd School Year        |                            |
|---------------------------------------------|----------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                             |                                                                                        | 上學期<br>1st semester        | 下學期<br>2nd semester        | 上學期<br>1st semester        | 下學期<br>2nd semester        |
|                                             |                                                                                        | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) |
| 共同必修<br>General<br>Required<br>Courses      | 應用英文(1)(2)<br>Applied English(1)(2)                                                    | 2/ 2                       | 2/ 2                       |                            |                            |
|                                             | 通識課程(1)(2)(3)(4)<br>General Studies(1)(2)(3)(4)                                        | 2/ 2                       | 2/ 2                       | 2/ 2                       | 2/ 2                       |
|                                             | 小 計Subtotal                                                                            | 4/ 4                       | 4/ 4                       | 2/ 2                       | 2/ 2                       |
| 專業必修<br>Professional<br>Required<br>Courses | 工程圖學<br>Engineering Drawing                                                            | 2/ 2                       |                            |                            |                            |
|                                             | 熱力學<br>Thermodynamics                                                                  | 2/ 2                       |                            |                            |                            |
|                                             | 電工學<br>Electricity Engineering                                                         | 2/ 2                       |                            |                            |                            |
|                                             | 冷凍空調原理<br>Principles of Refrigeration and Air Conditioning                             | 2/ 2                       |                            |                            |                            |
|                                             | 能源工程<br>Energy Engineering                                                             |                            | 2/ 2                       |                            |                            |
|                                             | 流體力學<br>Fluid Mechanics                                                                |                            | 2/ 2                       |                            |                            |
|                                             | 冷凍工程與設計<br>Refrigeration Engineering and Design                                        |                            | 2/ 2                       |                            |                            |
|                                             | 冷凍空調原理實驗<br>Experiment of Refrigeration and Air Conditioning Principle                 |                            | 2/ 2                       |                            |                            |
|                                             | 冷凍空調設備安裝實習<br>Refrigeration and air conditioning equipment installation internship     |                            |                            | 2/ 2                       |                            |
|                                             | 冷凍空調系統維修實習<br>Refrigeration and air conditioning system maintenance internship         |                            |                            | 2/ 2                       |                            |
|                                             | 空調工程與設計<br>Air Conditioning Engineering and Design                                     |                            |                            | 2/ 2                       |                            |
|                                             | 冷凍空調自動控制<br>Automatic Control of Refrigeration and Air Conditioning                    |                            |                            | 2/ 2                       |                            |
|                                             | 小 計Subtotal                                                                            | 8/ 8                       | 8/ 8                       | 8/ 8                       | 0/ 0                       |
| 專業選修<br>Professional<br>Elective<br>Courses | 冷凍空調基礎技術實習<br>Basic Refrigeration and Air Conditioning Technology Internship           | 2/ 2                       |                            |                            |                            |
|                                             | 冷凍空調測試與調試實習<br>Refrigeration and air conditioning testing and commissioning internship | 2/ 2                       |                            |                            |                            |
|                                             | 程式設計<br>Programming                                                                    | 2/ 2                       |                            |                            |                            |
|                                             | 簡報製作與表達<br>Presentation and Expression                                                 | 2/ 2                       |                            |                            |                            |
|                                             | 智慧財產權<br>Intellectual Property Right                                                   | 2/ 2                       |                            |                            |                            |
|                                             | 工業安全衛生<br>Industrial Safety and Health                                                 | 2/ 2                       |                            |                            |                            |
|                                             | 家電結構與電路實習<br>Home Appliance Structure and Circuit Practice                             |                            | 2/ 2                       |                            |                            |
|                                             | 家電維修與安全檢測實習<br>Home Appliance Repair and Safety Testing Internship                     |                            | 2/ 2                       |                            |                            |
|                                             | 可程式控制實習<br>Programmable Logic Controller Practice                                      |                            | 2/ 2                       |                            |                            |
|                                             | 電機機械<br>Electric Machinery                                                             |                            | 2/ 2                       |                            |                            |
|                                             | 電腦輔助冷凍空調繪圖<br>Computer Aided Refrigeration and Air Conditioning Drafting               |                            |                            | 2/ 2                       |                            |
|                                             | 感測器應用與實習<br>Applications and Laboratory Practice of Sensors                            |                            |                            | 2/ 2                       |                            |
|                                             | 流體機械<br>Fluid Machinery                                                                |                            |                            | 2/ 2                       |                            |
|                                             | 熱傳學<br>Heat Transfer                                                                   |                            |                            | 2/ 2                       |                            |

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| 科目名稱<br>Subject                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 第一學年1st School Year        |                            | 第二學年2nd School Year        |                            |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 上學期<br>1st semester        | 下學期<br>2nd semester        | 上學期<br>1st semester        | 下學期<br>2nd semester        |
|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) | (學分/時數)<br>(Credits/Hours) |
|                                               | 電力電子學<br>Power Electronics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                            | 2/ 2                       |                            |
|                                               | 冷凍空調工程管理<br>Management of Refrigerating and Air Conditioning Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |                            | 2/ 2                       |                            |
|                                               | 空調設計實務<br>Design Practice of Air Conditioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                            | 2/ 2                       |                            |
|                                               | 低溫工程<br>Cryogenic Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                            | 2/ 2                       |                            |
|                                               | 冷凍空調節能與控制實習<br>Refrigeration and air conditioning energy saving and control practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |                            |                            | 2/ 2                       |
|                                               | 冷凍空調診斷與維修實習<br>Refrigeration and air conditioning diagnosis and maintenance internship                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |                            |                            | 2/ 2                       |
|                                               | 機電與能源實習<br>Practice of Mechatronics and Energy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                            |                            |                            | 2/ 2                       |
|                                               | 物聯網應用與實習<br>IoT Applications and Practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |                            |                            | 2/ 2                       |
|                                               | 冷凍空調節能技術<br>Energy-Saving Technology in Refrigeration and Air Conditioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |                            |                            | 2/ 2                       |
|                                               | 通風工程<br>Ventilation Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                            |                            | 2/ 2                       |
|                                               | 太陽能工程<br>Solar Energy Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |                            |                            | 2/ 2                       |
|                                               | 電腦輔助空調系統分析<br>Computer Aided Air Conditioning System Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                            |                            | 2/ 2                       |
|                                               | 半導體廠務工程<br>Semiconductor Facility Engineering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |                            |                            | 2/ 2                       |
|                                               | 熱交換器設計<br>Heat Exchanger Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |                            |                            | 2/ 2                       |
| 擬開最低選修學分<br>Proposed Minimum Elective Credits |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6/ 6                       | 6/ 6                       | 8/ 8                       | 16/ 16                     |
| 合計Total                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 18/ 18                     | 18/ 18                     | 18/ 18                     | 18/ 18                     |
| 備註<br>Note                                    | 115年07月22日 校課程發展委員會會議通過Amended Date：2026-07-22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                            |                            |                            |                            |
|                                               | 一、畢業總學分至少72分：<br>The total number of credits completed to be eligible to graduate shall not be less than 72 credits.<br>1.共同必修12學分；專業必修24學分；專業選修至少36學分。<br>General Required Courses:12 credits. Professional Required Courses:24 credits. Professional Elective Courses: Not less than 36 credits.<br>2.一般選修至多7學分(開放學生自由選修本系或外系課程)。<br>The general elective credits shall be up to 7 credits. (Open for students to freely choose courses within their own or other departments)<br>二、畢業門檻：Graduation threshold<br>1.學生於修業年限內應修畢「共同必修」、「專業必修」、「專業選修(含一般選修)」共計72學分。<br>Students are required to complete a total of 76 credits of "General Required Courses", "Professional Required Courses", and "Professional Elective Courses" ("General Elective Course" included) within their academic years.<br>三、校訂課程 Stipulated Courses：<br>1.校訂課程不須依先後順序修課，不得互抵者，包括「應用英文(1)(2)、通識課程(1)(2)(3)(4)」課程。<br>Stipulated courses are not required to be taken in sequence and the credits shall not be mutually transferred, including 「Applied English(1)(2) and General Studies(1)(2)(3)(4)」 courses. |                            |                            |                            |                            |