

中信科技大學 機械工程系 碩士在職專班課程規劃表(適用113學年度入學)  
 CTBC University of Technology Curriculum of Mechanical Engineering Department  
 for In-Service Master's Program (Effective from Fall 2024)

| 科目名稱<br>Subject                         |  | 第一學年<br>1st school year             |             |                     |             | 第二學年<br>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<br>Credits                       | 時數<br>Hours | 學分<br>Credits       | 時數<br>Hours | 學分<br>Credits           | 時數<br>Hours | 學分<br>Credits       | 時數<br>Hours |
| 專業課程<br>Professional Courses            | 必修<br>Required   | 專題討論(1)(2)<br>Seminar (1)(2)        | 2/ 2        | 2/ 2                |             |                         |             |                     |             |
|   |  | 學術倫理專題<br>Academic Ethics Education | 1/ 1        |                     |             |                         |             |                     |             |
|   |  | 碩士論文<br>Master's Thesis             |             |                     |             | 6/ 6                    |             |                     |             |
|   |  | 小計Subtotal                          | 3/ 3        | 2/ 2                | 6/ 6        | 0/ 0                    |             |                     |             |
| 專業選修課程<br>Professional Elective Courses | 跨領域產業講座<br>Interdisciplinary Industrial Lecture                      |                                     |             | 2/ 2                |             |                         |             |                     |             |
|   | 塑膠加工技術講座<br>Seminar for Plastic Processing Technology                | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 研究方法與規劃<br>Research Methods and Planning                             | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 控制技術總論<br>Introductio of Control technology                          | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 實用金相學<br>Practical Metallography                                     | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 產業溫室氣體盤查<br>Industrial Greenhouse Gas Inventory                      | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 產業節能減碳技術<br>Industrial Energy Saving and Carbon Reduction Technology | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 產品設計與製造方法<br>Product Design and Manufacture Methods                  | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 開放式可程式控制器應用<br>Application of Open PLC                               | 4/ 4                                |             |                     |             |                         |             |                     |             |
|   | 機械特論與產業觀摩<br>Topics of Mechanical Engineering and Industry Visit     | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 陶瓷製程實務<br>Practicle Ceramic Processing                               | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 先進製造技術<br>Advented Manufacturing Technology                          | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 奈米材料製程<br>Nano-Material processing                                   | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 高等電腦輔助工程分析<br>Advanced Computer-Aided Engineering                    | 4/ 4                                |             |                     |             |                         |             |                     |             |
|   | 太陽能電池技術<br>Technology of Solar Cell                                  | 2/ 2                                |             |                     |             |                         |             |                     |             |
|   | 論文撰寫與探討<br>Thesis Writing and Discussion                             |                                     |             | 2/ 2                |             |                         |             |                     |             |
|   | 產品碳足跡<br>Product Carbon Footprint                                    |                                     |             | 2/ 2                |             |                         |             |                     |             |
|   | 微系統工程<br>Microsystem Engineering                                     |                                     |             | 2/ 2                |             |                         |             |                     |             |

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| 專業選修課程<br>Professional<br>Elective<br>Courses | 光學工程<br>Optical Engineering                             |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 智慧能源管理<br>Smart Energy Management                       |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 再生能源系統<br>Renewable Energy System                       |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 圖型語言控制技術<br>Control Technique of Graphical Programming  |   |             | 4/ 4                |             |                         |             |                     |             |
|   | 半導體製程技術<br>Semiconductor Process Technology             |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 多軸CNC加工<br>Introduction of Multi-Axis CNC Machining     |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 高等材料機械性質<br>Advanced Mechanical Properties of Materials |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 專利工程<br>Patent Engineering                              |   |             | 2/ 2                |             |                         |             |                     |             |
|   | 高等電腦輔助機械設計<br>Advanced Computer-Aided Mechanical Design |   |             | 4/ 4                |             |                         |             |                     |             |
|   | 小計Subtotal  | 32/   | 32          | 30/                 | 30          | 0/                      | 0           | 0/                  | 0           |
|   | 備註<br>Note  | 113年 07 月 30 日 校課程發展委員會會議通過Amended Date： 2024-07-30<br>1. 總畢業學分數至少31學分，包括專業必修11學分(含論文)、最低選修20學分。<br>The total number of credits completed to be eligible to graduate shall not be less than 31credits (11credits for professional required courses (including thesis), and minimum 20 credits for elective courses).<br>2. 各科成績以70分(含)以上為及格。<br>A score of 70 points or above in each subject shall be considered a pass.<br>3. 操行成績70分(含)以上為及格。<br>Conduct score of 70 points or above shall be considered a pass.<br>4. 碩士論文為6學分，碩士班學生須完成碩士論文及考核通過才可畢業。<br>The thesis credits shall be 6. The graduate students shall complete their graduation thesis and pass the assessment before graduation.<br>5. 碩士論文可跨所修課。<br>Interdepartmental courses taken shall be for Master's Thesis.<br>6. 修習「健康促進跨領域課程」、半導體跨領域課程」，最多上限8學分。<br>“Interdisciplinary Courses on Health Promotion” and “Semiconductor Interdisciplinary Courses” shall be taken with a maximum of 8 credits. |             |                     |             |                         |             |                     |             |