

# 中國文化大學工學院 電機工程學系 必修科目表

112 學年度起入學新生實施

| 必修類別           | 科目名稱   | 規定學分   | 一年級 |    | 二年級 |    | 三年級 |   | 四年級 |   | 備註             |
|----------------|--|--------|-----|----|-----|----|-----|---|-----|---|----------------|
|                |  |        | 上   | 下  | 上   | 下  | 上   | 下 | 上   | 下 |                |
| 通識科目           | 國文   | 4      | 2   | 2  |     |    |     |   |     |   |                |
|                | 外文   | 4      | 2   | 2  |     |    |     |   |     |   | 六選一課程<br>(同正課) |
|                | 外語實習   | 2      | 1   | 1  |     |    |     |   |     |   |                |
|                | 跨域專長   | 12     |     |    | 6   | 6  |     |   |     |   |                |
|                | 人文學科領域   | 4      |     |    |     |    |     |   |     |   |                |
|                | 社會科學領域   | 4      | 2   | 2  | 2   | 4  |     |   |     |   |                |
|                | 自然科學與數學領域  | 2      |     |    |     |    |     |   |     |   |                |
| 共同科目           | 體育   | 0      | 0   | 0  | 0   | 0  |     |   |     |   |                |
|                | 全民國防教育軍事訓練-(1)   | 0      |     | 0  |     |    |     |   |     |   |                |
| 通識及共同必修學分合計    |  | 32 學分  |     |    |     |    |     |   |     |   |                |
| 專業必修科目         | (2021)微積分  | 6      | 3   | 3  |     |    |     |   |     |   |                |
|                | (2026)普通物理學  | 6      | 3   | 3  |     |    |     |   |     |   |                |
|                | (6003)工程數學   | 6      |     |    | 3   | 3  |     |   |     |   |                |
|                | (7236)計算機概論  | 3      | 3   |    |     |    |     |   |     |   |                |
|                | (2184)線性代數   | 3      | 3   |    |     |    |     |   |     |   |                |
|                | (I119)邏輯電路設計(1)  | 3      |     | 3  |     |    |     |   |     |   |                |
|                | (I120)邏輯電路設計(2)  | 3      |     |    | 3   |    |     |   |     |   |                |
|                | (3694)電路學(1)   | 3      |     | 3  |     |    |     |   |     |   |                |
|                | (3700)電路學(2)   | 3      |     |    | 3   |    |     |   |     |   |                |
|                | (3522)信號與系統  | 3      |     |    | 3   |    |     |   |     |   |                |
|                | (6007)電子學(1)   | 3      |     |    | 3   |    |     |   |     |   |                |
|                | (6008)電子學(2)   | 3      |     |    |     | 3  |     |   |     |   |                |
|                | (2304)電磁學  | 3      |     |    |     |    | 3   |   |     |   |                |
|                | (2454)微處理機   | 3      |     |    |     |    | 3   |   |     |   |                |
|                | (I121)基礎電學實驗   | 1      |     |    | 1   |    |     |   |     |   |                |
|                | (D602)電子電路實驗   | 1      |     |    |     | 1  |     |   |     |   |                |
|                | (2027)普通物理學實驗  | 2      | 1   | 1  |     |    |     |   |     |   |                |
| (6277)機率與統計    | 3  |        |     |    | 3   |    |     |   |     |   |                |
| (D391)程式語言與實習  | 3  |        | 3   |    |     |    |     |   |     |   |                |
| (C650)專題研究與實作  | 2  |        |     |    |     |    |     | 1 | 1   |   |                |
| 專業必修學分合計       |  | 63 學分  |     |    |     |    |     |   |     |   |                |
| 必修學分總計         |  | 95     | 20  | 23 | 24  | 20 | 6   | 1 | 1   |   |                |
| 最低畢業學分數        |  | 135 學分 |     |    |     |    |     |   |     |   |                |
| <b>其他修業規定：</b> |  |        |     |    |     |    |     |   |     |   |                |
| 服務學習           | 參與服務學習，依本校「服務學習實施辦法」辦理，詳細資訊請參考綜合業務組網頁。 <a href="https://cur.pccu.edu.tw/">https://cur.pccu.edu.tw/</a>                             |        |     |    |     |    |     |   |     |   |                |
| 全球競爭力檢定        | 通過全球競爭力檢定，依本校「大學部學生全球競爭力檢定實施辦法」辦理，詳細資訊請參考教務組網頁。<br><a href="https://reg.pccu.edu.tw/">https://reg.pccu.edu.tw/</a>                 |        |     |    |     |    |     |   |     |   |                |
| 倫理課程           | 參與「職業倫理」、「中華文化專題」，依本校「職業倫理教育實施要點」及「中華文化專題講座實施要點」辦理，詳細資訊請參考綜合業務組網頁。 <a href="https://cur.pccu.edu.tw/">https://cur.pccu.edu.tw/</a> |        |     |    |     |    |     |   |     |   |                |
| 全人學習護照         | 參與全人學習護照各項學習活動達認證標準，依本校「全人學習護照實施辦法」辦理，詳細資訊請參考課外活動組網頁。<br><a href="https://activity.pccu.edu.tw/">https://activity.pccu.edu.tw/</a> |        |     |    |     |    |     |   |     |   |                |

**Chinese Culture University, Required Courses List,  
Department of Electrical Engineering**

Effective for Students Enrolled in and from the 2023 Academic Year

| Categories for Compulsory Courses                  | Course Title   | Credit Hours | 1st Year           |                    | 2nd Year           |                    | 3rd Year           |                    | 4th Year           |                    | Remark                              |
|--|--|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------------|
|  |  |              | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) |                                     |
| <b>Required Courses</b>                            |  |              |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| General Required Courses                           | CHINESE  | 4            | 2                  | 2                  |                    |                    |                    |                    |                    |                    |                                     |
|  | FOREIGN LANGUAGE   | 4            | 2                  | 2                  |                    |                    |                    |                    |                    |                    | Choose 1 of 6 Courses               |
|  | FOREIGN LANGUAGE LISTENING AND SPEAKING DRILL  | 2            | 1                  | 1                  |                    |                    |                    |                    |                    |                    | (Language matches the above chosen) |
|  | INTERDISCIPLINARY PROGRAM  | 12           |                    |                    | 6                  | 6                  |                    |                    |                    |                    |                                     |
|  | ART AND HUMANITIES   | 4            |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
|  | NATURAL SCIENCES AND MATHEMATICS   | 4            | 2                  | 2                  | 2                  | 4                  |                    |                    |                    |                    |                                     |
|  | SOCIAL SCIENCES  | 2            |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| Common Courses                                     | PHYSICAL EDUCATION   | 0            | 0                  | 0                  | 0                  | 0                  |                    |                    |                    |                    |                                     |
|  | ALL-OUT DEFENSE EDUCATION MILITARY TRAINING - INTERNATIONAL SITUATIONS   | 0            |                    | 0                  |                    |                    |                    |                    |                    |                    |                                     |
| <b>Total General and Common Courses Credits</b>    |  | <b>32</b>    | <b>9</b>           | <b>9</b>           | <b>8</b>           | <b>6</b>           |                    |                    |                    |                    |                                     |
| Required Courses by College                        |  |              |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| Required Courses by Department                     | (2021) CALCULUS  | 6            | 3                  | 3                  |                    |                    |                    |                    |                    |                    |                                     |
|  | (2026)GENERAL PHYSICS  | 6            | 3                  | 3                  |                    |                    |                    |                    |                    |                    |                                     |
|  | (6003)ENGINEERING MATHEMATICS  | 6            |                    |                    | 3                  | 3                  |                    |                    |                    |                    |                                     |
|  | (7236) ) INTRODUCTION TO COMPUTER SYSTEMS  | 3            | 3                  |                    |                    |                    |                    |                    |                    |                    |                                     |
|  | (2184) LINEAR ALGEBRA  | 3            | 3                  |                    |                    |                    |                    |                    |                    |                    |                                     |
|  | (I119) LOGIC CIRCUIT DESIGN (1)  | 3            |                    | 3                  |                    |                    |                    |                    |                    |                    |                                     |
|  | (I120) LOGIC CIRCUIT DESIGN (2)  | 3            |                    |                    | 3                  |                    |                    |                    |                    |                    |                                     |
|  | (3694) ELECTRICAL CIRCUITS THEORY (1)  | 3            |                    | 3                  |                    |                    |                    |                    |                    |                    |                                     |
|  | (3700)ELECTRICAL CIRCUITS THEORY (2)   | 3            |                    |                    | 3                  |                    |                    |                    |                    |                    |                                     |
|  | (3522) SIGNAL & SYSTEMS  | 3            |                    |                    | 3                  |                    |                    |                    |                    |                    |                                     |
|  | (6007) ELECTRONICS (1)   | 3            |                    |                    | 3                  |                    |                    |                    |                    |                    |                                     |
|  | (6008) ELECTRONICS (2)   | 3            |                    |                    |                    | 3                  |                    |                    |                    |                    |                                     |
|  | (2304) ELECTROMAGNETICS  | 3            |                    |                    |                    |                    | 3                  |                    |                    |                    |                                     |
|  | (2454) MICROPROCESSOR  | 3            |                    |                    |                    |                    | 3                  |                    |                    |                    |                                     |
|  | (I121)BASIC ELECTRICITY LAB  | 1            |                    |                    | 1                  |                    |                    |                    |                    |                    |                                     |
|  | (D602)ELECTRONIC CIRCUITS LAB  | 1            |                    |                    |                    | 1                  |                    |                    |                    |                    |                                     |
|  | (2027)GENERAL PHYSICS LAB  | 2            | 1                  | 1                  |                    |                    |                    |                    |                    |                    |                                     |
|  | (6277)PROBABILITY & STATISTICS   | 3            |                    |                    |                    | 3                  |                    |                    |                    |                    |                                     |
|  | (D391)PROGRAMMING LANGUAGE & LAB   | 3            |                    | 3                  |                    |                    |                    |                    |                    |                    |                                     |
| (C650) RESEARCH PROJECT AND IMPLEMENTATION         | 2  |              |                    |                    |                    |                    | 1                  | 1                  |                    |                    |                                     |
| <b>Total Credits of Required Subjects</b>          |  | <b>63</b>    |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| <b>Total Required Credits</b>                      |  | 95           | 20                 | 23                 | 24                 | 20                 | 6                  | 1                  | 1                  |                    |                                     |
| <b>Graduate Credits</b>                            |  | <b>135</b>   |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| <b>Other provisions of graduate requirements :</b> |  |              |                    |                    |                    |                    |                    |                    |                    |                    |                                     |
| Service Learning                                   | Participation in service learning shall be conducted in accordance with the 'Implementation Measures for Service Learning' of the university. For detailed information, please refer to the website of the Curriculum Section at <a href="http://cur.pccu.edu.tw/ezfiles/7/1007/img/166/HL04.pdf">http://cur.pccu.edu.tw/ezfiles/7/1007/img/166/HL04.pdf</a> |              |                    |                    |                    |                    |                    |                    |                    |                    |                                     |

| Categories for Compulsory Courses                         | Course Title   | Credit Hours | 1st Year           |                    | 2nd Year           |                    | 3rd Year           |                    | 4th Year           |                    | Remark |
|---|--|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|
|   |  |              | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) | 1st semester (Sep) | 2nd semester (Feb) |        |
| Global competitiveness                                    | Passing the "Implementation Measures for the Global Competitiveness Assessment of University Students" is mandatory for graduation. Visit the website of the Registration Section for more information.  |              |                    |                    |                    |                    |                    |                    |                    |                    |        |
| Professional Ethics/<br>Special Topics in Chinese Culture | According to the university's 'Implementation Guidelines for Professional Ethics Education' and 'Implementation Guidelines for Chinese Culture Topics Lectures,' students are required to participate in two-semester courses: 'Professional Ethics' and 'Chinese Culture Topics.' For detailed information, please refer to the website of the Curriculum Section: <a href="http://cur.pccu.edu.tw/ezfiles/7/1007/img/166/HL30.pdf">http://cur.pccu.edu.tw/ezfiles/7/1007/img/166/HL30.pdf</a> ." |              |                    |                    |                    |                    |                    |                    |                    |                    |        |
| Whole Person Learning Passport                            | To fulfill the Whole Person Learning Passport requirements, students must actively participate in various learning activities. These activities are organized in accordance with our university's guidelines for the Whole Person Learning Passport. For more detailed information, please visit the website of the Extracurricular Activities Section at <a href="https://activity.pccu.edu.tw/">https://activity.pccu.edu.tw/</a> ."   |              |                    |                    |                    |                    |                    |                    |                    |                    |        |