## 國立勤益科技大學113學年度進修部二年制電機工程科學分計畫表

National Chin-Yi University of Technology Continuing Education Division Curriculum for 2024 Two-year Association Program of Department of Electrical Engineering

> 112.11.02. 余課程會議通過 112.11.08. 糸務會議通過 112.11.22院課程委員會議審議通過 112.12.07. 校課程委員會議及112.12.21. 臨時教務會議審議通過

|                     | 112   |  |                 |                   | 12. 21. 臨時教務會議審議通過<br><b>下學期Second Semester</b> |               |  |  |
|---------------------|---|--|-----------------|-------------------|---|---------------|--|--|
| 科目                  | Courses   | 學分   | 期First Se<br>正課 | mester            | 學分  | 上課            | emester<br>實習                                    |  |
| 114                 |   |  |                 | 人 自<br>Internship | 子刀<br>Credit                                    | Lecture       | Internship                                       |  |
|                     | 共同必修科目(10學分)General Required Cour                     | ses(10cred                                       | lits hour       | s)                |   |               |  |  |
|                     | 第一學年First Year  |  |                 | _                 |   |               |  |  |
| 英文(一)               | English (I)   | 2  | 2               | 0                 |   |               |  |  |
| 國文(一)               | Chinese (I)   | 2  | 2               | 0                 |   |               |  |  |
| 國文(二)               | Chinese (II)  |  |                 |                   | 2   | 2             | 0  |  |
| 英文(二)               | English (II)  |  |                 |                   | 2   | 2             | 0  |  |
|                     | 第二學年Second Year                                       | _  |                 |                   |   |               |  |  |
| 法學概論                | Introduction to the Study of Law                      | · ·  |                 |                   |   | 2 0           |  |  |
| 科目                  | Courses   |  | 期First Se       |                   | 下學期Second Semester                              |               |  |  |
|                     | Courses   | 學分<br>Credit                                     | 正課<br>Lecture   | 實習<br>Internship  | 學分<br>Credit                                    | 正課<br>Lecture | 實習<br>Internship                                 |  |
|                     | 校訂必修科目(58學分)Department Required Cou                   | _  |                 |                   | 0.00.0  |               | те   |  |
|                     | 第一學年First Year  |  |                 |                   |   |               |  |  |
| 微積分(一)              | Calculus (I)  | 2  | 2               | 0                 |   | Ī             | Т  |  |
| △計算機程式              | Computer Programming                                  | 3  | 3               | 0                 |   |               | +  |  |
| 基本電學                | Basic Electricity                                     | 3  | 3               | 0                 |   |               | <del>                                     </del> |  |
| 邏輯設計                | Logic Design  | 3  | 3               | 0                 |   |               | <del>                                     </del> |  |
| 配電設計                | Electrical Power Distribution Design                  | <del>                                     </del> | <del> </del>    | <u> </u>          | 3   | 3             | 0  |  |
| 電路學(一)              | Electric Circuit Analysis (I)                         |  |                 | 1                 | 3   | 3             | 0  |  |
| 電子學(一)              | Electronics (I)                                       |  |                 | 1                 | 3   | 3             | 0  |  |
| 微積分(二)              | Calculus (II)   | 1  |                 |                   | 2   | 2             | 0  |  |
| pacing of ( == )    | 第二學年Second Year                                       | -  | 1               |                   |   |               |  |  |
| 電路學 (二)             | Electric Circuit Analysis (II)                        | 3  | 3               | 0                 |   |               | Т  |  |
| 電子學實習(一)            | Electronics Practice (I)                              | 2  | 1               | 1                 |   |               | +  |  |
| 電機機械實習(一)           | Electric Machinery Practice (I)                       | 2  | 1               | 1                 |   |               | +  |  |
| 工程數學                | Engineering Mathematics                               | 3  | 3               | 0                 |   |               | +  |  |
| 電機機械(一)             | Electric Machinery (I)                                | 2  | 2               | 0                 |   |               | +  |  |
| △微處理機               | Microprocessor  | 3  | 1               | 2                 |   |               | +  |  |
| 電子學 (二)             | Electronics (II)                                      | 3  | 3               | 0                 |   |               | +  |  |
| 電力系統                | Power System  | <u> </u>   |                 |                   | 3   | 3             | 0  |  |
| 工業電子學               | Industrial Electronics                                |  |                 |                   | 3   | 3             | 0  |  |
| 電動機控制               | Motor Control   | 1  |                 |                   | 3   | 3             | 0  |  |
| 電機機械(二)             | Electric Machinery (II)                               |  |                 |                   | 2   | 2             | 0  |  |
| 電機機械實習(二)           | Electric Machinery Practice (II)                      | 1  |                 |                   | 2   | 1             | 1  |  |
| 自動控制                | Automatic Control                                     | 1  |                 |                   | 3   | 3             | 0  |  |
| 電子學實習 (二)           | Electronics Practice (II)                             | 1  | 1               |                   | 2   | 1             | 1  |  |
|                     | 2.002.00.200 11.002.00 (11)                           | 上學   | 期First Se       | mester            | 下學期   | Second S      | emester  |  |
| 斜目                  | Courses   |  | 正課              | 實習                | 學分  | 正課            | 實習   |  |
|                     | at all and the sal of D                               |  | Lecture         | Internship        | Credit  | Lecture       | Internship                                       |  |
|                     | 專業選修科目Department Elective                             | s Courses  |                 |                   |   |               |  |  |
| 人去此上四十一四            | 第一學年First Year  | 1 0  | 1 ,             | 0                 |   | 1             | _  |  |
| △套裝軟體應用             | Package Software Application                          | 3  | 1               | 2                 |   |               |  |  |
| 能源應用                | Energy Application                                    | 2  | 2               | 0                 |   |               | +  |  |
| 無線感測網路              | Wireless Sensor Network                               | 2  | 2               | 0                 |   |               |  |  |
| 電機應用                | Electric Machinery Application                        | 2  | 2               | 0                 | 0   | 0             | <del>                                     </del> |  |
| 電機設備保護<br>交 総 索 エ 和 | Electrical Equipment Protection                       | +  |                 |                   | 3   | 3             | 0  |  |
| 發變電工程               | Generation Transformation Engineering                 | +  |                 |                   | 3   | 3             | 0  |  |
| 消防工程                | Fire Protection Engineering                           | +  |                 |                   | 2   | 2             | 0  |  |
| 電腦輔助繪圖              | Computer Aided Drafting                               | +  | 1               |                   | 3   | 3             | 0  |  |
| 監控系統設計及實習           | SCADA System Design and Practice                      | +  | 1               |                   | 3   | 1             | 2  |  |
| △連網型系統晶片嵌入式軟體       | Networked SoC Embedded Software                       |  |                 |                   | 3   | 3             | 0  |  |
|                     | 第二學年Second Year                                       | 1  |                 | 1 1               |   | 1             |  |  |
| 電腦輔助配電設計及實習         | Computer Aided Power Distribution Design and Practice | 3  | 1               | 2                 |   |               |  |  |
| 感測器應用               | Sensors Application                                   | 2  | 2               | 0                 |   |               | $\vdash$   |  |
|                     | <u> </u>  | -  |                 |                   |   |               |  |  |

| 網路分析  | Network                       | Network Analysis                          |              |               | 3                     | 3               | 0                |                        |               |                  |  |  |
|---|-------------------------------|---|--------------|---------------|-----------------------|-----------------|------------------|------------------------|---------------|------------------|--|--|
| 電力與能源概論   | Introduc                      | Introduction to Power and Energy          |              |               |                       | 2               | 0                |                        |               |                  |  |  |
| 電磁學   | Basic El                      | Basic Electromagnetics                    |              |               |                       |                 |                  | 3                      | 3             | 0                |  |  |
| 線性代數  | Linear A                      | Linear Algebra                            |              |               |                       |                 |                  | 3                      | 3             | 0                |  |  |
| △圖控軟體應用   | Graphica                      | Graphical Programming Application         |              |               |                       |                 |                  | 3                      | 1             | 2                |  |  |
| 電力品質  | Power Qu                      | Power Quality                             |              |               |                       |                 |                  | 3                      | 3             | 0                |  |  |
|   |                               |   |              |               | 上學期First Semester     |                 |                  | 下學期Second Semester     |               |                  |  |  |
| 科目  | Courses                       | Courses                                   |              |               |                       | 正課<br>Lecture   | 實習<br>Internship | 學分<br>Credit           | 正課<br>Lecture | 實習<br>Internship |  |  |
|   |                               | 共同追                                       | 選修科目Genera   | al Elective C | ourses                |                 |                  |                        |               | _                |  |  |
|   |                               |   | 第二學年S        | econd Year    |                       |                 |                  |                        |               |                  |  |  |
| 通識課程  | Liberal Education Curriculums |   |              |               |                       |                 | 2                | 2                      | 0             |                  |  |  |
| 學分/時數統計<br>Credit/Hour Total                              | •                             | 第一學年First Year                            |              |               |                       | 第二學年Second Year |                  |                        |               |                  |  |  |
|   |                               | 上學期 下學期<br>First Semester Second Semester |              |               | 上學期<br>First Semester |                 |                  | 下學期<br>Second Semester |               |                  |  |  |
|   | 學分<br>Credit                  | 學時<br>Hour                                | 學分<br>Credit | 學時<br>Hour    | 學分<br>Cred            |                 | 學時<br>Hour       | 學分<br>Credit           |               | 學時<br>Hour       |  |  |
| 必修科目學分/時數<br>Required Courses Credit / Hour               | 15                            | 15  | 15           | 15            | 18                    |                 | 18               | 20                     |               | 20               |  |  |
| 最低選修科目學分/時數<br>Minimum Electives Courses Credit<br>/ Hour | 5                             | 5   | 5            | 5             | 2                     |                 | 2                | 0                      |               | 0                |  |  |
| 總學分數/時數累計<br>Credits / Hours Total                        | 20                            | 20  | 20           | 20            | 20                    |                 | 20               | 20                     |               | 20               |  |  |

## 備註Note:

- 一、 畢業至少應修満 80 學分【必修 67 學分,選修至少 13 學分(其中至少需含本系專業選修 9 學分)】。 Students should complete at least 80 credits before graduation, including 67 required credits, 13 elective credits (elective credits should have at least 9 credits from department elective courses).
- 二、 選修通識課程包含性別平等、智慧財產權、海洋教育等相關課程;選修通識課程由通識學院協助開設。 Liberal Education Courses include gender equality courses、intellectual property courses、marine education courses, and these courses provided by College of General Education.
- 三、 課程名稱前有標示「 $\triangle$ 」符號者,為「程式設計課程」。 Courses with a " $\triangle$ " refers to an application design course.
- 四、 實際開課狀況需依當學期、依各科目授課進度與老師可配合授課情形安排,本系歷年開課,請至本校「校務行政網路系統-學生篇」查詢。

The actual commencement of classes will be arranged based on the current semester situation, the progress of each subject's curriculum, and the availability of teachers for instruction. Information about courses offered in previous years for this department can be found by checking the 'Student Information Management System' on our school's website.

- 五、 課程名稱前有標示「●」符號者,為「職能專業課程」。 Courses with a "●" refer to a professional competence course.
- 六、 課程名稱前有標示「AI」符號者,為「人工智慧相關課程」。 Courses with an "AI" refer to an artificial intelligence related course.