**元智大學電機通訊學院 與 School of Electrical Engineering, Universitas Telkom 雙聯學制**

**元智大學 電機通訊學院英語學士班 必修科目表**

**（114學年度入學新生適用）**

**College of Electrical and Communication Engineering, Yuan Ze University and School of Electrical Engineering, Universitas Telkom
Dual Degree Program**

**International Bachelor Program in Electrical and Communication Engineering for at Yuan Ze University**

**List of Compulsory Courses**

**（Applicable to Students Admitted in Academic Year of 2025.）**

114.6.4 一一三學年度第六次教務會議通過

Passed by the 6th Academic Affairs Meeting, Academic Year 2024, on June 4, 2025

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 學年(Academic Year)學期(Semester)科目(Course | 第一學年1st Academic Year | 第二學年2nd Academic Year | 第三學年3rd Academic Year | 第四學年4th Academic Year |
| 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring |
| 必修科目Compulsory Courses(9 ) |  |  |  |  |  | 畢業專題Graduation Project(3)EEA496 | 畢業專題Graduation Project(3)EEB332 | 畢業專題Graduation Project(3)EI302 |
| 學期學分小計Credit each semester | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 |
| 備註Remarks | 1. 括弧內數字為學分數。Parenthesized numbers are course credits.
2. 畢業學分128學分，雙聯學生於本班應取得三分之一學分以上，即為43學分。其中包含必修9學分、選修24學分及自由選修10學分(通識教育科目學分只採計至多4學分，超修之學分將不列入畢業學分。)Required credits for graduation is 128 credits, Dual-degree students must earn at least one-third of the required credits for graduation, which is 43 credits, including 9 credits for compulsory ccourses, 24 credits for elective courses, 10 credits for free elective courses (The maximum credits for general education courses is 4, the exceeding credits will not be counted.).
3. **畢業學分**：**43學分** (通識教育科目學分只採計至多4學分，超修之學分將不列入畢業學分。)Required credits for graduation: at least 43 credits, (The maximum credits for general education courses is 4, the exceeding credits will not be counted.)
4. **必修：9學分** Compulsory Courses: 9 credits
5. **選修：至少 24學分。**Elective Courses: at least 24 credits.
6. **自由選修**：**10學分**。Free Elective Courses: 10 credit.
7. 修習碩士班課程以大三以上學生為限，且不得修習碩士在職專班課程。Master's degree courses are limited to students in their third year or above, and students are not allowed to take courses from the Executive Master program.
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**元智大學電機通訊學院 與 School of Electrical Engineering, Universitas Telkom 雙聯學制**

**元智大學 電機通訊學院英語學士班 選修科目表**

**（113學年度入學新生適用）**

**College of Electrical and Communication Engineering, Yuan Ze University**

**And**

 **School of Electrical Engineering, Universitas Telkom**

 **Dual Degree Program**

**International Bachelor Program in Electrical and Communication Engineering for at Yuan Ze University**

**List of Elective Courses**

**（Applicable to Students Admitted in Academic Year of 2025）**

114.\*\*.\*一一三學年度第\*次教務會議通過

Passed by the \*th Academic Affairs Meeting, Academic Year 2024, on \*\*\*, 2025

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 學年Academic Year學期Semester科目Course | 第一學年 1st Academic Year | 第二學年2nd Academic Year | 第三學年3rd Academic Year | 第四學年4th Academic Year |
| 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring |
| 電子相關領域Electronics-related Field |  |  | 資料結構Data Structures(3) EI219 | 電子學(二)Electronics(II)(3) EI202 | 自動控制（一）Automatic Control(I)(3) EEA351 | 物聯網應用技術與實作（一）IoT Ecosystem and Applications(I) (3) EEA494 | 機器人概論Introduction to Robotics(3) EI412 |  |
|  |  | 機器學習導論Introduction to Machine Learning(3) EI228 | 離散數學Discrete Mathematics(3) EI218 | 數位信號處理實驗Digital Signal Processing Lab.(1) EEA387 | 半導體元件物理Semiconductor Devices Physics(3) EI312 | 半導體製程技術Semiconductor Processing Technology(3) EI413 |  |
|  |  |  | 多媒體通訊概論Introduction toMultimedia Communications(3) EI224 | 超大型積體電路設計導論Introduction to VLSI(3) EI309 | 深度學習使用PythonDeep Learning with Python(3) EI320 | 演化計算Evolutionary Computation (3) EI415 |  |
|  |  |  | 雲端計算概論Introduction to Cloud Computing(3) EI226 | 自主移動機器人Autonomous Mobile Robot(3) EI319 | 電動載具技術Electric Vehicles Technology(3) EI326 | 半導體加工技術Semiconductor Processing Technology (3) EI417 |  |
|  |  |  |  | 數位信號處理概論Introduction of Digital Signal Processing(3) EI404 | 再生能源轉換及儲存系統Renewable Energy Conversion & Storage Systems(3) EI328 |  |  |
|  |  |  |  |  | 最佳化與啟發式演算法Optimization and Heuristics(3) EI330 |  |  |
|  |  |  |  |  | 電力電子Power Electronics(3) EI406 |  |  |
| 電信相關領域Telecommunications -related Field |  |  | 機器學習導論Introduction to Machine Learning(3) EI228 | 作業系統Operation Systems(3) EEB310 | 射頻工程導論Introduction to RF engineering(1) EEB327 | 通訊實驗Communications Lab.(1) EEB320 | 微電腦智慧應用Intelligent Microcontroller Applications(3) EEB439 | 行動通訊概論Introduction to Mobile Communications (3) EEB413 |
|  |  |  | 多媒體通訊概論Introduction tomultimedia communications(3) EEB322 | 通訊系統Communications System(3) EI301 | 天線設計與量測實驗Experiment of Antenna Design and Measurement (3) EEB414 |  |  |
|  |  |  | 半導體光學Semiconductor Optics(3) EI215 | 自主移動機器人Autonomous Mobile Robot(3) EI319 | 數位通訊 Digital Communications(3) EI304 |  |  |
|  |  |  |  | 數位信號處理概論Introduction of Digital Signal Processing(3) EI404 | 電磁波Electromagnetic Waves(3) EI306 |  |  |
|  |  |  |  |  | 通訊電子學Communication Electronics(3) EI401 |  |  |
| 英文精進English Booster |  |  | 科技英文寫作Science and Technology English Writing(2) EI209 | 科技英文簡報Science and Technology English Presentation(2) EI210 |  |  |  |  |
| 備註Remarks | 1. 括弧內數字為學分數。 Parenthesized numbers are course credits.
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