

國立勤益科技大學 114 學年度進修部四年制產攜 2.0 - 產學攜手合作計畫
工業工程與管理系智慧生產與精實管理專班學分計畫表
National Chin-Yi University of Technology Continuing Education Division Curriculum for 2025 Department
of Industrial Engineering and Management Four-Year Bachelor Program of Smart Production and Lean
Management Class.

113.10.23 系課程委員會
113.10.30 系務會議審議通過
113.11.19 113 學年度第 1 次院課程會議審議通過
113.12.05 校課程委員會及 113.12.24 臨時教務會議審議通過
114.10.9 系課程委員會、114.10.29 系務會議審議通過
114.11.19 114 學年度第 1 學期第 1 次院課程會議審議通過
114.12.04 校課程委員會及 114.12.23 臨時教務會議審議通過

| 科目 | Courses | 上學期 First Semester | | | 下學期 Second Semester | | |
|--|--|--------------------|---------------|------------------|---------------------|---------------|------------------|
| | | 學分 Credit | 正課 Lecture | 實習 Internship | 學分 Credit | 正課 Lecture | 實習 Internship |
| 共同必修科目(24學分)General Required Courses(24credits hours) | | | | | | | |
| 第一學年 First Year | | | | | | | |
| 應用國文(一) | Applied Chinese (I) | 2 | 2 | 0 | | | |
| 實用英文(一) | Practical English (I) | 3 | 3 | 0 | | | |
| 應用數學(一) | Applied Mathematics (I) | 3 | 3 | 0 | | | |
| 體育(一) | Physical Education (I) | 0 | 2 | 0 | | | |
| 應用國文(二) | Applied Chinese (II) | | | | 2 | 2 | 0 |
| 實用英文(二) | Practical English (II) | | | | 3 | 3 | 0 |
| 應用數學(二) | Applied Mathematics (II) | | | | 3 | 3 | 0 |
| 體育(二) | Physical Education (II) | | | | 0 | 2 | 0 |
| 第二學年 Second Year | | | | | | | |
| 英文聽力與閱讀 | Listening and Speaking | 2 | 2 | 0 | | | |
| 職場倫理與生涯規劃 | Organization Ethics and and Career Planing | 2 | 2 | 0 | | | |
| 工業日文 | Industrial Japanese | | | | 2 | 2 | 0 |
| 人際關係與溝通協調 | Interpersonal Relationships and Communication and Coordination | | | | 2 | 2 | 0 |
| 科目 | Courses | 上學期 First Semester | | | 下學期 Second Semester | | |
| | | 學分 Credit | 正課 Lecture | 實習 Internship | 學分 Credit | 正課 Lecture | 實習 Internship |
| 專業必修科目(68學分)Department Required Courses(68credits hours) | | | | | | | |
| 第一學年 First Year | | | | | | | |
| 產業實務實習(一) | Industrial Practice Internship (I) | 3 | 0 | 6 | | | |
| 工業工程與管理導論 | Introduction to Industrial Engineering and Management | 3 | 3 | 0 | | | |
| △計算機概論 | Introduction to Computer Science | 3 | 3 | 0 | | | |
| 產業實務實習(二) | Industrial Practice Internship (II) | | | | 3 | 0 | 6 |
| △計算機程式 | Computer Program | | | | 3 | 3 | 0 |
| 智慧製造概論 | Introduction to Intelligent Manufacturing | | | | 3 | 3 | 0 |
| 第二學年 Second Year | | | | | | | |
| 產業實務實習(三) | Industrial Practice Internship (III) | 3 | 0 | 6 | | | |
| 統計學 | Statistics | 3 | 3 | 0 | | | |
| 自動化概論 | Introduction to Automation | 3 | 3 | 0 | | | |
| 電腦輔助繪圖 | Computer Aided Drawing | 3 | 3 | 0 | | | |
| 產業實務實習(四) | Industrial Practice Internship (IV) | | | | 3 | 0 | 6 |
| 物料管理 | Material Management | | | | 3 | 3 | 0 |
| 自動化資料蒐集系統 | Automatic Data Collection Systems | | | | 3 | 3 | 0 |
| 第三學年 Third Year | | | | | | | |
| 產業實務實習(五) | Industrial Practice Internship (V) | 3 | 0 | 6 | | | |
| 品質管理 | Quality Management | 3 | 3 | 0 | | | |
| 生產管理 | Production Management | 3 | 3 | 0 | | | |
| 電腦輔助設計與製造 | Computer Aided Design and Manufacturing | 3 | 3 | 0 | | | |
| 產業實務實習(六) | Industrial Practice Internship (VI) | | | | 3 | 0 | 6 |
| 工作研究 | Work Study | | | | 3 | 3 | 0 |
| 自動化生產系統 | Automatic Manufacturing System | | | | 3 | 3 | 0 |
| 第四學年 Fourth Year | | | | | | | |
| 產業實務實習(七) | Industrial Practice Internship (VII) | 3 | 0 | 6 | | | |
| 實務專題(一) | Practical Project Study (I) | 1 | 3 | 0 | | | |
| 產業實務實習(八) | Industrial Practice Internship (VIII) | | | | 3 | 0 | 6 |
| 實務專題(二) | Practical Project Study (II) | | | | 1 | 3 | 0 |
| 科目 | Courses | 上學期 First Semester | | | 下學期 Second Semester | | |
| | | 學分 Credit | 正課 Lecture | 實習 Internship | 學分 Credit | 正課 Lecture | 實習 Internship |
| 專業選修科目 Department Electives Courses | | | | | | | |
| 第二學年 Second Year | | | | | | | |
| 網際網路與電子商務 | Internet and Electronic Commerce | 3 | 3 | 0 | | | |
| 模具工程 | Mold-and-die Engineering | 3 | 3 | 0 | | | |
| 數值分析 | Numerical Analysis | 3 | 3 | 0 | | | |
| 會計學 | Accounting | 3 | 3 | 0 | | | |
| 套裝軟體應用 | Software Application and Practice | 3 | 3 | 0 | | | |

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|--------------------------------|--|-------------------|---------------|------------------|--------------------|---------------|------------------|
| 工業安全 | Industrial Safety | 3 | 3 | 0 | | | |
| 工具工程 | Tool Engineering | | | | 3 | 3 | 0 |
| 人因工程 | Ergonomics | | | | 3 | 3 | 0 |
| 數控工具機技術 | The Technology of Numerical Control Machine | | | | 3 | 3 | 0 |
| 廠房節能概論 | Introduction to Factory Energy Saving | | | | 3 | 3 | 0 |
| 資料庫系統 | Database Management Systems | | | | 3 | 3 | 0 |
| 英文能力檢定 | English Proficiency Test | | | | 3 | 3 | 0 |
| 作業研究 | Operations Research | | | | 3 | 3 | 0 |
| 物流技術與管理 | Logistics System Management | | | | 3 | 3 | 0 |
| 商務企劃管理 | Business Planning and Management | | | | 3 | 3 | 0 |
| 財務管理 | Financial Management | | | | 3 | 3 | 0 |
| 系統分析與設計 | System Analysis and Design | | | | 3 | 3 | 0 |
| △機聯網規劃與設計 | Planning and Programming of IOMs | | | | 3 | 3 | 0 |
| 電腦輔助3D繪圖 | Computer Aided 3D Graphics | | | | 3 | 3 | 0 |
| 第三學年Third Year | | | | | | | |
| 工業安全衛生法規 | Ordinance on Industrial Safety and Health | 3 | 3 | 0 | | | |
| 塑性加工 | Plastic Workings | 3 | 3 | 0 | | | |
| 應用日文 | Applied Japanese | 3 | 3 | 0 | | | |
| 績效評估 | Performance Evaluation Method | 3 | 3 | 0 | | | |
| 企業電子化 | Enterprise Digitization | 3 | 3 | 0 | | | |
| 物流與供應鏈系統設計 | Logistics and Supply Chain System Design | 3 | 3 | 0 | | | |
| 製造策略管理 | Manufacturing Strategy Management | 3 | 3 | 0 | | | |
| 工業心理學 | Industrial Psychology | | | | 3 | 3 | 0 |
| 品質工程 | Quality Engineering | | | | 3 | 3 | 0 |
| 工業衛生 | Industrial Hygiene | | | | 3 | 3 | 0 |
| 企業資源規劃系統 | Enterprise Resource Planning Systems | | | | 3 | 3 | 0 |
| △應用程式設計 | C Language Program Design | | | | 3 | 3 | 0 |
| 無線識別技術概論 | Introduction to Wireless Identification Technology | | | | 3 | 3 | 0 |
| 產品資料管理 | Product Data Management | | | | 3 | 3 | 0 |
| 統計製程管制 | Statistical Process Control | | | | 3 | 3 | 0 |
| 非傳統加工 | Nontraditional Machining | | | | 3 | 3 | 0 |
| 工程經濟 | Engineering Economics | | | | 3 | 3 | 0 |
| 氣液壓學 | Pneumatics and Hydraulics | | | | 3 | 3 | 0 |
| 智慧供應鏈管理 | Smart Supply Chain Management | | | | 3 | 3 | 0 |
| 管理資訊系統 | Management Information Systems | | | | 3 | 3 | 0 |
| 行銷管理 | Marketing Management | | | | 3 | 3 | 0 |
| 精實管理 | Lean Management | | | | 3 | 3 | 0 |
| 第四學年Fourth Year | | | | | | | |
| 人力資源管理 | Human Resource Management | 3 | 3 | 0 | | | |
| 電腦整合製造系統 | CIM System | 3 | 3 | 0 | | | |
| 產品專利實務 | Product Patent Practice | 3 | 3 | 0 | | | |
| 現代化生產管理 | Modern Production Management | 3 | 3 | 0 | | | |
| 全面品質管理 | Total Quality Management | 3 | 3 | 0 | | | |
| 組織行為與管理 | Organizational Behavior and Management | 3 | 3 | 0 | | | |
| 專案管理 | Project Management | 3 | 3 | 0 | | | |
| 商業營運模式 | Business Model | 3 | 3 | 0 | | | |
| 設施規劃 | Facilities Planning | 3 | 3 | 0 | | | |
| 系統模擬 | System Simulation | | | | 3 | 3 | 0 |
| 管理經濟 | Managerial Economics | | | | 3 | 3 | 0 |
| 產品開發與設計 | Product Development and Design | | | | 3 | 3 | 0 |
| 產業診斷與改善 | Industrial Diagnosis and Improvement | | | | 3 | 3 | 0 |
| 顧客關係管理 | Customer Relationship Management | | | | 3 | 3 | 0 |
| 時間與溝通管理 | Time and Communication Management | | | | 3 | 3 | 0 |
| 國際品質保證 | International Quality Assurance | | | | 3 | 3 | 0 |
| 產品創新實務 | Product Innovation Practice | | | | 3 | 3 | 0 |
| 電腦輔助原型設計 | Computer-Aided Prototyping | | | | 3 | 3 | 0 |
| 商務溝通 | Business Communication | | | | 3 | 3 | 0 |
| 策略管理 | Strategy Management | | | | 3 | 3 | 0 |
| 科目 | Courses | 上學期First Semester | | | 下學期Second Semester | | |
| | | 學分 Credit | 正課 Lecture | 實習 Internship | 學分 Credit | 正課 Lecture | 實習 Internship |
| 共同選修科目General Elective Courses | | | | | | | |
| 第一學年First Year | | | | | | | |
| 全民國防教育軍事訓練(一) | All-Out Defense Education Military Training (I) | 1 | 2 | 0 | | | |
| 全民國防教育軍事訓練(二) | All-Out Defense Education Military Training (II) | | | | 1 | 2 | 0 |
| 第二學年Second Year | | | | | | | |
| 全民國防教育軍事訓練(三) | All-Out Defense Education Military Training (III) | 1 | 2 | 0 | | | |
| 全民國防教育軍事訓練(四) | All-Out Defense Education Military Training (IV) | | | | 1 | 2 | 0 |
| 第三學年Third Year | | | | | | | |
| 體育選修 | Physical Education Elective | 1 | 2 | 0 | | | |

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|--|---|------------|------------------------|------------|-----------------------|------------|------------------------|------------|-----------------------|------------|------------------------|------------|-----------------------|------------|------------------------|------------|
| 全民國防教育軍事訓練(五) | All-Out Defense Education Military Training (V) | 1 | 2 | 0 | | | | | | | | | | | | |
| 體育選修 | Physical Education Elective | | | | 1 | 2 | 0 | | | | | | 1 | 2 | 0 | |
| 第四學年Fourth Year | | | | | | | | | | | | | | | | |
| 體育選修 | Physical Education Elective | 1 | 2 | 0 | | | | | | | | | | | | |
| 體育選修 | Physical Education Elective | | | | | | | | | | | | 1 | 2 | 0 | |
| 學分/時數統計 Credit/Hour Total | 第一學年First Year | | | | 第二學年Second Year | | | | 第三學年Third Year | | | | 第四學年Fourth Year | | | |
| | 上學期 First Semester | | 下學期 Second Semester | | 上學期 First Semester | | 下學期 Second Semester | | 上學期 First Semester | | 下學期 Second Semester | | 上學期 First Semester | | 下學期 Second Semester | |
| | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour | 學分 Credit | 學時 Hour |
| 必修科目學分/時數 Required Courses Credit / Hour | 17 | 22 | 17 | 22 | 16 | 19 | 13 | 16 | 12 | 15 | 9 | 12 | 4 | 9 | 4 | 9 |
| 最低選修科目學分/時數 Minimum Electives Courses Credit / Hour | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 6 | 6 | 9 | 9 | 12 | 12 | 12 | 12 |
| 總學分數/時數累計 Credits / Hours Total | 17 | 22 | 17 | 22 | 19 | 22 | 16 | 19 | 18 | 21 | 18 | 21 | 16 | 21 | 16 | 21 |

備註Note:

- 一、 畢業至少應修滿 128 學分【必修 92 學分，選修至少 36 學分(其中至少需含本系專業選修 24 學分)】。
Students should complete at least 128 credits before graduation, including 92 required credits, 36 elective credits (elective credits should have at least 24 credits from department elective courses).
- 二、 通識教育學院所開設之「博雅通識課程」學分數(時)為2學分2學時或3學分3學時，經 101 學年度第二學期校課程委員會會議通過。
Liberal Arts General Study courses opened by College of General Education, are divided into 2 hours course with 2 credits or 3 hours course with 3 credits, ratified by Course Committee in 2012.
- 三、 課程名稱前有標示「△」符號者，為「程式設計課程」。
Courses with a "△" refers to an application design course.
- 四、 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.
- 五、 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.
- 六、 為因應法規變更、評鑑建議或政府計畫規定等外在因素，本系保有調整學分計畫之權利。若有修訂，將於學期開始前公告，並明確說明修訂內容、影響範圍及相關配套措施，以保障學生權益。
The department reserves the right to adjust the curriculum in response to external factors such as changes in regulations, suggestions of evaluation and accreditation, or government program regulations. If there are any revisions, will be announced before the start of the semester, and the revised content, scope of impact, and related supporting measures will be clearly stated to protect the rights and interests of students.