

國立勤益科技大學113學年度進修部二年制電子工程系學分計畫表

National Chin-Yi University of Technology Continuing Education Division Curriculum for 2024 Two-Year Bachelor Program of Department of Electronic Engineering

112.11.13課程委員會及112.11.22院課程委員會審議通過
 112.12.07.校課程委員會議及112.12.21.臨時教務會議審議通過
 113.12.05.校課程委員會議及113.12.24.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(10學分)General Required Courses(10credits hours)							
第一學年First Year							
實用英文	Practical English	2	2	0			
中國文學	Chinese Literature				2	2	0
第二學年Second Year							
歷史與文化	History and Culture	2	2	0			
憲法與民主	Constitution and Democracy				2	2	0
藝術與哲學	Art and Philosophy				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
校訂必修科目(22學分)Department Required Courses(22credits hours)							
第一學年First Year							
電子電路(一)	Electronic Circuits (I)	3	3	0			
工程數學(一)	Engineering Mathematics (I)	3	3	0			
△DSP實務(一)	Digital Signal Processing Practice (I)	3	3	0			
△DSP實務(二)	Digital Signal Processing Practice (II)				3	3	0
實務專題(一)	Project Study (I)				2	0	3
工程數學(二)	Engineering Mathematics (II)				3	3	0
電子電路(二)	Electronic Circuits (II)				3	3	0
第二學年Second Year							
實務專題(二)	Project Study (II)	2	0	3			
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							
第一學年First Year							
智慧機器人Intelligent Robotics							
智慧型機器人系統應用專題	Application Project of Intelligent Robotic System	3	3	0			
PLC應用實作	Programmable Logic Controller Practice	3	3	0			
機器人控制	Robot Control	3	3	0			
嵌入式微處理器系統與實習	Embedded Microprocessor System and Practice	3	3	0			
機器視覺	Machine Vision	3	3	0			
模糊控制	Fuzzy Control				3	3	0
工業機器人原理與應用	Principle and Application of Industrial Robots				3	3	0
智慧感測與監控實務	Smart Sensor and Supervisory Control Practice				3	3	0
電力電子學	Power Electronics				3	3	0
網路多媒體暨遊戲機領域Network Multimedia and Game Machine							
網路概論	Introduction to Network	3	3	0			
△視窗程式設計	Windows Programming	3	3	0			
數位信號處理	Digital Signal Processing	3	3	0			
遊戲企劃	Game Design	3	3	0			
3D物件建模技術	3D Modeling Technology	3	3	0			
3D動畫技術	3D Animation Technology				3	3	0
人工智慧	Artificial Intelligence				3	3	0
遊戲製作	Game Development				3	3	0
深度學習應用	Applied Deep Learning				3	3	0
嵌入式微處理器系統與實習	Embedded Microprocessor System and Practice				3	3	0
積體電路與系統應用Integrated Circuit and System Application							
類比積體電路設計	Analog IC Design	3	3	0			
積體電路製程	Integrated Circuit Manufacturing Process	3	3	0			
嵌入式系統應用	Embedded System Application	3	3	0			
電磁相容原理	Principle of Electromagnetic Compatibility	3	3	0			
電路板製造與產業概論	Introduction to Circuit Board Manufacturing and Industry	3	3	0			
人工智慧晶片導論	Introduction to AI on Chip	3	3	0			
半導體設備概論	Introduction to Semiconductor Equipment	3	3	0			
記憶體元件	Memory Devices				3	3	0
低功耗積體電路設計	Low Power IC Design				3	3	0
光電轉換導論	Introduction to Optical-Electrical Transfer				3	3	0

高速PCB設計	High-Speed Printed Circuit Board Design				3	3	0	
智慧電子科技	Intelligent Electronic Technology				3	3	0	
第二學年Second Year								
智慧機器人Intelligent Robotics								
定位導航概論	Introduction to Positioning and Navigation	3	3	0				
智慧機電實務	Smart Mechatronics Practice	3	3	0				
人機介面	Design of Human-Machine Interface	3	3	0				
電機控制原理與應用	Electrical Control Principle and Application				3	3	0	
可攜式電源設計	Portable Power Supply Design				3	3	0	
人工智慧	Artificial Intelligence				3	3	0	
△機器人程式設計	Robotic Programming				3	3	0	
網路多媒體暨遊戲機領域Network Multimedia and Game Machine								
資料庫系統應用	Database System Application	3	3	0				
作業系統	Operating System	3	3	0				
計算機結構	Computer Architecture	3	3	0				
遊戲物理導論	Introduction to Game Physics	3	3	0				
數位成音(一)	Digital Audio (I)	3	3	0				
數位成音(二)	Digital Audio (II)				3	3	0	
演算法	Algorithms				3	3	0	
虛擬實境	Virtual Reality				3	3	0	
擴增實境導論	Introduction to Augmented Reality				3	3	0	
物聯網概論	Introduction to Internet of Things				3	3	0	
△雲端科技應用	Applied Cloud Computing				3	3	0	
△嵌入式系統開發實習	Embedded System Development and Practice				3	3	0	
△工業機器人程式設計	Industrial Robot Programming				3	3	0	
積體電路與系統應用Integrated Circuit and System Application								
材料科學概論	Introduction to Material Science	3	3	0				
射頻積體電路導論	Introduction to RFIC Design	3	3	0				
電力電子積體電路設計	Power Electronics IC Design	3	3	0				
太陽能系統與應用	Solar Cell System and Application	3	3	0				
△嵌入式軟體設計實務	Embedded Software Design and Practice	3	3	0				
電磁相容之標準與測試	Electromagnetic Compatibility of Standards and Test	3	3	0				
生醫感測器概論	Introduction to Biosensor Devices				3	3	0	
IC測試技術	IC Test Technology				3	3	0	
IC封裝技術	IC Package Technology				3	3	0	
半導體元件模擬	Semiconductor Device Simulation				3	3	0	
運算放大器設計實務	Practical Design of Operational Amplifiers				3	3	0	
電磁相容實務	Practice of Electromagnetic Compatibility				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								
第二學年Second Year								
體適能與健康管理	Physical Fitness and Health Management	2	2	0				
通識課程	Liberal Education Curriculums	2	2	0				
通識課程	Liberal Education Curriculums				2	2	0	
休閒運動	Leisure and Sports				2	2	0	
學分/時數統計 Credit/Hour Total	第一學年First Year				第二學年Second Year			
	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
必修科目學分/時數 Required Courses Credit / Hour	11	11	13	14	4	5	4	4
最低選修科目學分/時數 Minimum Electives Courses Credit / Hour	8	8	5	5	14	14	14	14
總學分數/時數累計 Credits / Hours Total	19	19	18	19	18	19	18	18

備註Note:

- 一、 畢業至少應修滿 72 學分【必修 32 學分，選修至少 40 學分(其中至少需含本系專業選修 27 學分)】。
Students should complete at least 72 credits before graduation, including 32 required credits, 40 elective credits (elective credits should have at least 27 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「△」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.