

國立勤益科技大學 115 學年度進修部四年制產學攜手合作計畫專班  
機械工程系智慧機械應用專班學分計畫表

National Chin-Yi University of Technology Continuing Education Division  
Curriculum for 2026 Department of Mechanical Engineering Four-Year Bachelor Program of Intelligent Machine Applications

114.10.22 114學年度第1學期第1次系課程會議通過  
114.11.05 114學年度第1學期第2次系務會議通過  
114.11.20 114學年度第1學期第1次院課程會議通過  
114.12.04 校課程委員會議及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								
國文(一)	Chinese (I)	2	2	0				
大一英文(一)	Freshman English (I)	3	3	0				
體育(一)	Physical Education (I)	0	2	0				
國文(二)	Chinese (II)			2	2	0		
大一英文(二)	Freshman English (II)			3	3	0		
體育(二)	Physical Education (II)			0	2	0		
微積分(一)	Calculus (I)			3	3	0		
第二學年Second Year								
微積分(二)	Calculus (II)	3	3	0				
第三學年Third Year								
音樂鑑賞	Music Appreciation	2	2	0				
藝術鑑賞	Art Appreciation	2	2	0				
第四學年Fourth Year								
人際關係與溝通協調	Interpersonal Relationship and Managerial Communication				2	2	0	
職場倫理與生涯規劃	Occupational Ethics and Career Planning				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(81學分)Department Required Courses(81credits hours)								
第一學年First Year								
應用數學	Applied Mathematics	3	3	0				
電腦輔助機械製圖	Computer Aided Mechanical Drawing	3	2	1				
△程式語言	Programming Language	3	3	0				
靜力學	Statics	3	3	0				
產業實務實習(一)	Industry Internship (I)	3	0	6				
產業實務實習(二)	Industry Internship (II)				3	0	6	
物聯網概論	Introduction to Internet of Things				3	3	0	
動力學	Dynamics				3	3	0	
第二學年Second Year								
產業實務實習(三)	Industry Internship (III)	3	0	6				
機構學	Mechanism	3	3	0				
數控工具機與實習	CNC Machine Tool and Practice	3	1	2				
智慧製造技術	Intelligent Manufacturing Technology	3	3	0				
產業實務實習(四)	Industry Internship (IV)				3	0	6	
機器人控制實務	Robot Control Practice				3	3	0	
智慧機械與機聯網整合技術	Intelligent Machinery and Machine Networking Integration Technology				3	3	0	
材料力學	Mechanics of Materials				3	3	0	
第三學年Third Year								
產業實務實習(五)	Industry Internship (V)	3	0	6				
精密量具檢驗與實習	Precision Measuring Test and Practice	3	2	1				
感測聯網與數據分析技術	Sensor Networking and Data Analysis Technology	3	3	0				
△產業實務實習(六)	Industry Internship (VI)				3	0	6	
可程式控制器	Programmable Logic Controller Principles and Applications				3	3	0	
機電整合	Mechatronics and Integration				3	3	0	
第四學年Fourth Year								
產業實務實習(七)	Industry Internship (VII)	3	0	6				
電腦輔助工程分析	Computer Aided Engineering Analysis	3	2	1				
產業實務概論	Introduction to Industrial Practice	3	3	0				
產業實務實習(八)	Industry Internship (VIII)				3	0	6	
電腦輔助製造	Computer Aided Manufacturing				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	
專業選修科目Department Electives Courses								
第二學年Second Year								
綜合加工機技術概論	Introduction to Comprehensive Processing Machine Technology	3	3	0				

微機械加工	Micromachines	3	3	0										
工業安全與衛生	Industrial Safety and Health	3	3	0										
工程數學	Engineering Mathematics				3	3	0							
沖壓模設計	Stamping Die Design				3	3	0							
自動控制	Automatic Control				3	3	0							
逆向工程與快速原型技術	Reverse Engineering and Rapid Prototyping				3	3	0							
第三學年Third Year														
感測器原理與應用	Sensor Principle and Application	3	3	0										
精密加工技術	Precision Machining	3	3	0										
自動化機構設計	Automatic Machine System Design	3	3	0										
工業設計	Design of Industrial	3	3	0										
微控制器	Microcontroller	3	3	0										
科技英文（一）	English for Science and Technology (I)	3	3	0										
創新產品開發設計	Innovative Product Development and Design				3	3	0							
工業心理學	Industrial Psychology				3	3	0							
電腦輔助繪圖證照班	Computer Aided Drafting Certification Class				3	3	0							
奈米科技概論	Introduction to Nanotechnology				3	3	0							
科技英文（二）	English for Science and Technology (II)				3	3	0							
第四學年Fourth Year														
人因工程	Human Factor Engineering	3	3	0										
機電整合實務	Mechatronics Practice	3	3	0										
切削加工學	Theory of Metal Cutting	3	3	0										
自動裝配	Automatic Assembly	3	3	0										
自動化量測	Automated Measurement	3	3	0										
製程規劃	Manufacturing Process Planning	3	3	0										
3D參數化機械設計	3D Parametric Mechanical Design				3	3	0							
非傳統加工	Non-Traditional Machining Processes				3	3	0							
精密鑄造學	Precision Casting				3	3	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			
	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	20	25	17	22	15	18	12	15	11	14	11	14	8	11
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	6	6	3	3
總學分數/時數累計 Credits / Hours Total	20	25	17	22	18	21	15	18	17	20	17	20	14	17

備註Note:

- 畢業至少應修滿 128 學分【必修 105 學分，選修至少 23 學分(其中至少需含本系專業選修 21 學分)】。  
Students should complete at least 128 credits before graduation, including 105 required credits, 23 elective credits (elective credits should have at least 21 credits from department elective courses).
- 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 provided by College of General Education, are divided into 2 hours course with 2 credits or 3 hours course with 3 credits, ratified by the School Course Committee in 2012.
- 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.
- 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.
- 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.
- 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.