國立勤益科技大學113學年度進修部二年制機械工程系學分計畫表

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

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							
憲法與民主	Constitution and Democracy	2	2	0			
實用英文	Practical English	2	2	0			
歷史與文化	History and Culture				2	2	0
中國文學	Chinese Literature				2	2	0
第二學年Second Year							
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(18學分)Department Required Courses(18credits hours)							
第一學年First Year							
工程數學(一)	Engineering Mathematics (I)	3	3	0			
電腦輔助實務	Computer Aided Practice	3	3	0			
工程數學(二)	Engineering Mathematics (II)				3	3	0
動力學	Dynamics				3	3	0
第二學年Second Year							
流體力學	Fluid Mechanics	3	3	0			
自動控制	Automatic Control				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							
第一學年First Year							
電路學	Circuits	3	3	0			
氣液壓工程實務	Pneumatic and Hydraulic Engineering Practice	3	3	0			
產品造形設計	Modeling Design of Industrial Products	3	3	0			
半導體製程	Semiconductor Processing Technology	3	3	0			
△視覺化C#程式設計	Visual C# Language	3	3	0			
3D參數化機械設計	3D Parametric Mechanical Design	3	3	0			
自動化概論	Introduction to Automation				3	3	0
微控制器	Microcontroller				3	3	0
應用電子學(一)	Applied Electronics (I)				3	3	0
△LabView程式設計與應用	LabVIEW Programming and Application				3	3	0
工程材料	Engineering Material				3	3	0
線性代數	Linear Algebra				3	3	0
半導體製程設備	Semiconductor Equipment				3	3	0
製造學	Manufacturing Processes				3	3	0
第二學年Second Year							
薄膜技術與應用	Thin Film Technology and Applications	3	3	0			
感測器原理與應用	Sensor Principle and Application	3	3	0			
太陽能概論	Introduction to Solar Energy Engineering	3	3	0			
夾治具設計	Jig and Fixture Design	3	3	0			
非破壞檢驗	Non-Destructive Testing	3	3	0			
汽車工程	Automotive Engineering	3	3	0			
微機電系統	Microelectromechanical Systems (MEMS)	3	3	0			
機器人控制實務	Robot Control Practice	3	3	0			
機電整合	Mechatronics and Integration	3	3	0			
振動學	Vibration				3	3	0
可再生能源技術與應用	Technology and Application of Renewable Energy				3	3	0
CNC加工	CNC Machining				3	3	0
逆向工程	Reverse Engineering				3	3	0
可靠度工程	Introduction to Reliability Engineering				3	3	0
應用電子學(二)	Applied Electronics (II)				3	3	0
腐蝕防治	Corrosion Prevention				3	3	0
流固力量測實務	Fluid-Solid Force Measurement Practices				3	3	0
奈米材料概論	Introduction to Nanomaterials				3	3	0

科目	Courses	上學期First Semester 學分 Credit	上學期First Semester 正課 Lecture	上學期First Semester 實習 Internship	下學期Second Semester 學分 Credit	下學期Second Semester 正課 Lecture	下學期Second Semester 實習 Internship
共同選修科目General Elective Courses							
第二學年Second Year							
通識課程	Liberal Education Curriculums	2	2	0			
通識課程	Liberal Education Curriculums				2	2	0

學分/時數統計 Credit/Hour Total	第一學年First Year 上學期 First Semester 學分 Credit	第一學年First Year 上學期 First Semester 學時 Hour	第一學年First Year 下學期 Second Semester 學分 Credit	第一學年First Year 下學期 Second Semester 學時 Hour	第二學年Second Year 上學期 First Semester 學分 Credit	第二學年Second Year 上學期 First Semester 學時 Hour	第二學年Second Year 下學期 Second Semester 學分 Credit	第二學年Second Year 下學期 Second Semester 學時 Hour
必修科目學分/時數 Required Courses Credit / Hour	10	10	10	10	5	5	3	3
最低選修科目學分/時數 Minimum Electives Courses Credit / Hour	9	9	9	9	12	12	15	15
總學分數/時數累計 Credits / Hours Total	19	19	19	19	17	17	18	18

備註Note:

一、 畢業至少應修滿 72 學分【必修 28 學分，選修至少 44 學分(其中至少需含本系專業選修 36 學分)】。
Students should complete at least 72 credits before graduation, including 28 required credits, 44 elective credits (elective credits should have at least 36 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.