

National Chin-Yi University of Technology Continuing Education Division
Curriculum for 2025 Department of Mechanical Engineering Four-Year Bachelor Program of Design and Manufacturing of Machine Tools and Precision Molds

113.10.23 113學年度第1學期第1次系課程會議審議通過
113.11.13 113學年度第1學期第2次系務會議審議通過
113.11.19 113學年度第1學期第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

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)	3	3	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)				3	3	0
大一英文(二)	Freshman English (II)				3	3	0
體育(二)	Physical Education (II)				0	2	0
第二學年Second Year							
體育(三)	Physical Education (III)	0	2	0			
藝術鑑賞(一)	Art Appreciation (I)	1	1	0			
音樂鑑賞(一)	Music Appreciation (I)				1	1	0
體育(四)	Physical Education (IV)				0	2	0
第三學年Third Year							
科技英文(一)	English for Science and Technology (I)	3	3	0			
科技英文(二)	English for Science and Technology (II)				3	3	0
第四學年Fourth Year							
博雅通識課程	Liberal Education Curriculums	2	2	0			
博雅通識課程	Liberal Education Curriculums				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(77學分)Department Required Courses(77credits hours)							
第一學年First Year							
*機械工作法	Mechanical Method	2	1	2			
*立式綜合加工機技術概論	Introduction to Vertical Comprehensive Processing Machine Technology	2	1	2			
*工具機實習	Machine Tool Practice	2	0	6			
*電腦輔助繪圖實習	Computer Aided Drafting and Practice	1	0	3			
*模具設計加工法	Mold Design and Processing Method	3	3	0			
*圖學與製圖實習	Practice of Graphics and Cartography	1	0	3			
材料科學與工程	Material Science and Engineering	3	3	0			
*電腦輔助模具設計概論	Introduction to Computer Aided Mold Design				2	1	2
應用數學	Applied Mathematics				3	3	0
第二學年Second Year							
微積分(一)	Calculus (I)	3	3	0			
靜力學	Statics	3	3	0			
△程式語言	Programming Language	3	3	0			
材料試驗	Experiment of Engineering Material	1	0	3			
產業實務實習(一)	Industry Internship (I)	3	0	6			
微積分(二)	Calculus (II)				3	3	0
動力學	Dynamics				3	3	0
機構學	Mechanism				3	3	0
製造學	Manufacturing Processes				3	3	0
產業實務實習(二)	Industry Internship (II)				3	0	6
第三學年Third Year							
材料力學	Mechanics of Materials	3	3	0			
切削刀具學	Tooling for Metal Cutting	3	3	0			
產業實務實習(三)	Industry Internship (III)	3	0	6			
機械設計	Mechanical Design				3	3	0
智慧機械概論	Introduction to Intelligent Machinery				3	3	0
產業實務實習(四)	Industry Internship (IV)				3	0	6
第四學年Fourth Year							
精密量具與實習	Precision Measuring and Practice	3	2	2			
產業實務實習(五)	Industry Internship (V)	3	0	6			
工具機設計	Machine Tool Design				3	3	0
產業實務實習(六)	Industry Internship (VI)				3	0	6
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

*沖模設計學	Die Design				2	1	2
*塑模設計學	Design of Plastic Mold				2	1	2
*CAD/CAM概論	Introduction to CAD/CAM				3	3	0
*CAD/CAM實習	CAD/CAM Practice				1	0	3
*模具應用實習	Mold Application Practice				2	0	6
*模具製作實習	Mold Making Practice				1	0	3
*電腦輔助模具設計實習	Computer Aided Mold Design and Practice				1	0	3
*數控機械應用與實習	CNC Machine Application and Practice				3	1	4

第三學年 Third Year

電機學與實習	Mectromechanical and Practice	3	2	2			
非傳統加工	Non-Traditional Machining Processes	3	3	0			
應用電子學與實習	Applied Electronics and Practice				3	2	2
工程倫理	Engineering Ethics				3	3	0

第四學年 Fourth Year

機電整合與實習	Mechatronics Theory and Practice	3	2	2			
夾治具設計	Jig and Fixture Design	3	3	0			
應用熱傳學		3	3	0			
製程規劃	Manufacturing Process Planning				3	3	0
電腦輔助工程分析	Computer Aided Engineering Analysis				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

全民國防教育軍事訓練(五)	All-Out Defense Education Military Training (V)	1	2	0			
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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												
必修科目學分/時數 Required Courses Credit / Hour	20	32	11	14	14	21	16	21	12	15	12	15	8	12	8	11
最低選修科目學分/時數 Minimum Electives Courses Credit / Hour	0	0	15	29	0	0	0	0	3	3	3	3	3	3	3	3
總學分數/時數累計 Credits / Hours Total	20	32	26	43	14	21	16	21	15	18	15	18	11	15	11	14

備註 Note:

- 畢業至少應修滿 128 學分【必修 101 學分，選修至少 27 學分(其中至少需含本系專業選修 27 學分)】。
Students should complete at least 128 credits before graduation, including 101 required credits, 27 elective credits (elective credits should have at least 27 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.
- 第一學年必須選讀*職訓中心基礎訓練課程28學分。
- 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.