

國立勤益科技大學113學年度進修部四年制產攜2.0－產學攜手合作計畫
冷凍空調與能源系冷凍空調能源產業專班學分計畫表

National Chin-Yi University of Technology Continuing Education Division
Curriculum for 2024 Four-Year Bachelor Program of Department of Refrigeration, Air-Conditioning and
Energy Engineering Industry-Academia-Training

112.10.11系課程會議審議通過
112.10.27系務會議審議通過
112.11.23院課程會議審議通過
112.12.07.校課程委員會議及112.12.21.臨時教務會議審議通過
113.04.22系課程會議審議通過
113.05.08系務會議審議通過
113.5.14院課程會議審議通過
113.5.21.校課程委員會議及113.6.6.臨時教務會議審議修訂通過
113.12.05 校課程委員會議及113.12.24 臨時教務會議審議通過
114.05.28系課程會議審議通過
114.06.11系務會議審議通過
114.11.20 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			
微積分（一）	Calculus (I)	3	3	0			
職場倫理與生涯規劃	Business Ethics and Career Planning	3	3	0			
體育（一）	Physical Education (I)	0	2	0			
國文（二）	Chinese (II)				2	2	0
微積分（二）	Calculus (II)				3	3	0
體育（二）	Physical Education (II)				0	2	0
第二學年Second Year							
人際溝通	Interpersonal Communication	3	3	0			
英文（一）	English (I)	3	3	0			
英文（二）	English (II)				3	3	0
第三學年Third Year							
通識領域課程	Liberal Education				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(69學分)Department Required Courses(69credits hours)							
第一學年First Year							
△計算機程式	Computer Program	3	3	0			
物理（一）	Physics (I)	3	3	0			
產業實務實習（一）	Industrial Practice Internship (I)	3	0	6			
工業安全與衛生	Industry Safety and Hygiene				3	3	0
產業實務實習（二）	Industrial Practice Internship (II)				3	0	6
電子學	Electronics				3	3	0
熱力學	Thermodynamics				3	3	0
第二學年Second Year							
工程數學（一）	Engineering Mathematics (I)	3	3	0			
冷凍空調原理	Principles of Refrigeration and Air-Conditioning	3	3	0			
流體力學	Fluid Mechanics	3	3	0			
產業實務實習（三）	Industrial Practice Internship (III)	3	0	6			
太陽能工程	Solar Energy Engineering				3	3	0
冷凍工程	Refrigeration Engineering				3	3	0
產業實務實習（四）	Industrial Practice Internship (IV)				3	0	6
電路學	Electric Circuits				3	3	0
第三學年Third Year							
空調工程	Air-Conditioning Engineering	3	3	0			
能源工程	Energy Engineering	3	3	0			
產業實務實習（五）	Industrial Practice Internship (V)	3	0	6			
流體機械	Fluid Machinery				3	3	0
產業實務實習（六）	Industrial Practice Internship (VI)				3	0	6
第四學年Fourth Year							
冷凍空調節能技術	Energy Saving Techniques for HVAC and R	3	3	0			
產業實務實習（七）	Industrial Practice Internship (VII)	3	0	6			
產業實務實習（八）	Industrial Practice Internship (VIII)				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							
冷凍冷藏應用技術	Application Technique of Freezing and Cold Storage				3	3	0
物理（二）	Physics (II)				3	3	0

備註Note:

- 一、 畢業至少應修滿 130 學分【必修 93 學分，選修至少 37 學分(其中至少需含本系專業選修 30 學分)】。
Students should complete at least 130 credits before graduation, including 93 required credits, 37 elective credits (elective credits should have at least 30 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 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. Four-year students in the Division of Continuing Education should take 2 courses in different fields for a minimum of 4 credits.
- 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、 畢業前需取得冷凍空調裝修丙級技術士(含)以上、太陽光電設置乙級證照或室內配線丙級資格。
Before graduation, each student should pass qualifications Level C or above for Refrigerating & Air Conditioning, Level B for Installations of solar photovoltaic system or Level C for Commercial Wiring.
- 五、 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.

