

國立勤益科技大學113學年度進修部二年制冷凍空調與能源系學分計畫表

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

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
113.12.05 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							
中國文學	Chinese Literature	2	2	0			
實用英文	Practical English				2	2	0
第二學年Second Year							
憲法與民主	Constitution and Democracy	2	2	0			
歷史與文化	History and Culture				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(18學分)Department Required Courses(18credits hours)							
第一學年First Year							
工程數學	Engineering Mathematics	3	3	0			
電子電路	Electronic Circuit	3	3	0			
熱力與熱傳學	Thermodynamics and Heat Transfer	3	3	0			
程式語言設計	Computer Programming Design				3	3	0
第二學年Second Year							
冷凍空調控制	Refrigeration and Air-Conditioning System Control	3	3	0			
冷凍空調工程與設計	Design of Refrigeration and Air Conditioning Engineering				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							
冷凍空調變頻省能控制	Frequency Conversion Energy-Saving Control of Refrigeration and Air-Conditioning	3	3	0			
特殊空調工程	Distinctive Air-Conditioning	3	3	0			
冷凍系統設計	Refrigeration System Design	3	3	0			
電工學理論與分析	Electrotechnical Theory and Analysis	3	3	0			
用電設備檢驗	Electrical Equipment Inspection	3	3	0			
冷凍空調監控與網路化	Monitoring and Webs of HVAC and R				3	3	0
無塵室技術	Cleanroom Technology				3	3	0
流體力學與流體機械	Fluid Mechanics and Fluid Machinery				3	3	0
通風工程	Ventilation Engineering				3	3	0
空調節能技術	Energy Conservation for Air-Conditioning				3	3	0
空調業經營管理實務	Management and Administration Practice of Air-Conditioning Industry				3	3	0
空調系統與生物安全	The Biosafety In HVAC				3	3	0
現代控制	Modern Control				3	3	0
第二學年Second Year							
汽電共生	Cogeneration System	3	3	0			
室內空氣品質	Indoor Air Quality	3	3	0			
冷凍空調設備量測技術	Measurement Techniques of HVAC and R Equipment	3	3	0			
工業管理	Industrial Management	3	3	0			
組織領導與溝通	Organizational Leadership and Communication	3	3	0			
新能源工程	Introduction to Advanced Energy Engineering	3	3	0			
電機應用	Electric Machinery Applications	3	3	0			
高層大樓配電設計	Power Distribution Design of High Buildings				3	3	0
△網路分析	Network Analysis				3	3	0
空調與環境控制	Air-Conditioning and Environmental 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
共同選修科目General Elective Courses							
第二學年Second Year							
通識課程	Liberal Education Curriculums	3	3	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	5	5	5	5	7	7
最低選修科目學分/時數 Minimum Electives Courses Credit / Hour	8	8	12	12	12	12	12	12
總學分數/時數累計 Credits / Hours Total	19	19	17	17	17	17	19	19

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、 若至日間部及進修部三、四年級修習專業必、選修課程者，需向系上提出申請，審核通過方可修課。
If students will want to study professional required/elective courses in the third and fourth grades of the daytime and continuing education departments, they must apply to the department, students can study the courses after the department will review to approve courses.
- 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.