

Curriculum Map for
2019 2+i Industry-Academia Collaboration Program of Mechatronics Engineering
108學年度國立勤益科技大學2+i冷凍空調與能源系機械工程專班 課程地圖

	First Year 一年級		Second Year 二年級		Third Year 三年級	Ability 能力	Job Occupation 就業職稱
	First semester 上學期	Second semester 下學期	First semester 上學期	Second semester 下學期	First semester 上學期		
General Required courses 通識基礎課程	Chinese Listening and speaking I 華語聽說(一)	Chinese Listening and speaking II 華語聽說(二)	Chinese Listening and speaking III 華語聽說(三)			Language 語文能力	
	Chinese Speaking and writing I 華語讀寫(一)	Chinese Speaking and writing II 華語讀寫(二)					
	Physical Education (I) 體育(一)	Physical Education (II) 體育(二)				Physical Fitness 體能	
		Art and philosophy 藝術與哲學				Art 藝術鑑賞	
	Engineering Mathematics I 工程數學(一)	Engineering Mathematics II 工程數學(二)				Mathematical Logic Analysis 數理邏輯分析	
	Refrigeration Engineering and Practices 冷凍工程及實習	Air- Condition Engineering and Practices 空調工程與實習				Operation & Installation 實施與安裝	

Professional Courses 專業課程	Practice of Refrigeration and Air-Conditioning Installation and Maintenance 冷凍空調基礎裝修實務	Practice of Refrigeration and Air-Conditioning Installation and Maintenance 冷凍空調裝修實務	Refrigeration and Air-Conditioning System Diagnostic 冷凍空調系統故障分析			Practice & Test 實作及測試	Refrigerated air conditioning renovation staff 冷凍空調裝修人員
	Variable Frequency Energy Saving Control 變頻節能控制		Project Study (I) 實務專題(一)	Project Study (II) 實務專題(二)		Control & Maintenance 控制及維護	
	Automatic Control 自動控制		Vibration and Noise Control 振動與噪音控制				
	Cooling Technique of Electronic Equipment 電子設備冷卻技術						
			Cleanroom Technology 無塵室技術	Distinctive Air-Conditioning System 特殊空調系統		Air conditioning & Design 空調與設計	
				Ventilation Engineering 通風工程			
		Introduction to Fire Fighting Engineering 消防控制概論	Industry Safety 工業安全			Fire Fighting Safety 消防安全	
	Thermodynamics 熱力學	Fuzzy Control Theory 模糊控制概論	Environmental control 環境控制			Basic Theory 基礎概論	

Professional Courses 專業課程		Energy Engineering Principle and Practices 能源工程與實習		Industry practice (I) 產業實習(一)	Industry practice (II) 產業實習(二)	Theory & Internship 理論與實習	Refrigerated air conditioning designer 冷凍空調設計人員
		Electromechanical integration practice 機電整合實務			Project research 專案研究		
		Extracurricular Intern (I) (summer vacation) 校外實習一(暑期)					
			Modern Control 現代控制				
		Computer 3D graphics 電腦立體製圖		Applications of Computational Fluid Dynamics Package 流場分析專業軟體應用		Software application & design 軟體應用與設計	
	Virtual Instrument Applications 虛擬儀控軟體應用		Heat Exchanger Design and Analysis 熱交換器設計				
	Introduction to Fuel Cells 燃料電池概論		Wind Power Generation 風力發電			Power application 能源應用	
			Computer-Aided Engineering Analysis and Design and Lighting 綠建築與照明節能				
				Planning and Management of Refrigeration and Air-Conditioning Engineering 冷凍空調工程規劃及管理		Plan & Management 規劃及管理	
	General Required courses 通識必修	Professional Required Courses 專業必修	Professional Elective Courses 專業選修				