明志科技大學四技日間部114學年度入學 環境與安全衛生工程系 課程總表

Ming Chi University of Technology [2025 SchoolYear] Department of Safety, Health and Environmental Engineering Curriculum

114/03/04校課程委員會議審議通過 114/06/05院課程委員會議審議通過 114/01/16系課程委員會議審議通過 Examination at School Curriculum Committee Meeting on March 4,2025 Examination at College Curriculum Committee Meeting on June 03,2025 ination at Department Curriculum Committee Meeting on January 16,2025

			科目名稱	一上 Grade 1 First Semester	G	一下 Grade 1 Second Semester		二上 rade 2 Semester	二下 Grade 2 Second Semester		三上 Grade 3 First Semester		Gra- Second :		Gra First So		Grac Second S	le 4	選課 條件	每班人數 Number of Class		備註
			Course Name	學分 時數 Credits Hour			學分 Credits		學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	Course Selection Conditions	上限 Upper		Remarks
	+		文學鑑賞與情意表達(Appreciation of Literature and Emotional Expression)	2 2																Limit	Limit	
必 修 Compulsory			永續發展與社會實踐(Sustainable Development and Social Practice)	1 1																		
		基礎課程	生活與職場英文(English for Life and Business) 全民國防教育軍事訓練(All-out Defense Education Military Training)	3 3 0.5 2		2																
		(22學分) Basic Course (22Credits)	體剪(Physical Education) 藝文涵養與社會參與(Art Literacy and Social Participation) 歷史思維與多元文化領域(Historical Thinking and Multicultural Studies)	1 2	1 2	2	2	2	1	2												
			英語聽講(Aural-Oral English) 英文實務(一)-(二)(Practical English)				1	2	1	2					1	2	1	2		50		
			合 計 Total	7.5 10	6.5	9	4	6	2	4	0	0	0	0	1	2	1	2	22			
		核心課程 (2學分)	大學之道(The Goal of University Education)	1 2																		
	共	Core Course	設計思考(Design Thinking)		1	1																
	同	(2 Credits)	合 計 Total	1 2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2			
	42 學 分 ·	校共同課程 18學分) Common School Course (18 Credits)	多元學習前素養訓練模組(Reliminary Literacy Training for Multimodal Learning)								1	1										「專案研究實質耐蒸餐訓練」、「海外交換學習耐蒸餐訓 達了、「工讀實務實質耐蒸餐訓練」。課程三擇一修讓"Choose one course to take from Pro-Professional Research Practicum Training," Pro-Overseas Exchange Learning Training, or "Pre-Work- study Practicum Training."
	Common Compulsory (Requires 42 Credits)		多元學習模組(一)(Multimodal Learning Module I)										4	40								「工讀實務實習(一)」、「專案研究實習(一)」、「海外交換學習(一)」源程三擇一修課でRoose one course to take from Work-study Practicum (I)', Professional Research Practicum (I)', or Overseas Exchange Learning (I)."
			多元學習模組(二)(Multimodal Learning Module II)										4	40								「工讀實務實習(二)」、「專案研究實習(二)」、「海外交換學習(二)」,譯起三擇一搭課(Thoose one course to take from Work-study Practicum (II)', Professional Research Practicum (II)', or 'Overseas Exchange Learning (II)."
			多元學習模組(三)(Multimodal Learning Module III)										4	40								「工讀實務實習(三)」、「專案研究實習(三)」、「海外交換學習(三)」課程三擇一修課(Thoose one course to take from Work-study Practicum (III), Professional Research Practicum (III), or Overseas Exchange Learning (III)." 「工讀實務實習(四)」、「專案研究實習(四)」、「海外交換
	ry		多元學習模組(四)(Multimodal Learning Module IV)							L		L	5	40								學習(四)」課程三擇一修課"Choose one course to take from "Work-study Practicum (IV)", 'Professional Research Practicum (IV)', or 'Overseas Exchange Learning (IV).""
		Being agent some	合 計 Total	0 0	0	0	0	0	0	0	1	1	17	160	0	0	0	0	18			
		院專業必修 (0學分) College Professional	環資學院未開設共同必修課程 College does not offer compulsory courses																			
		Compulsory (0 Credits)	合 計 Total	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
			普通化學(General Chemistry)	3 3																		Land Cart
			工業安全(Industrial Safety) 電腦在環境工程上的應用(Application of Computer on Environmental Engineering)	2 2																		模組A Module A
	專業		微積分(Calculus)	3 3	3	3																
	^		普通化學實驗(General Chemistry Experiment) 有機化學(Organic Chemistry)		2	2																
	49 學		工業衛生(Industrial Hygiene)		2	2																模組A Module A
	分		質能均衡(Mass and Energy Balances) 工程數學(一)(Engineering Mathematics (1))		2	2	3	3														
	Professional		工程統計與程式語言(Engineering Statistics and Programming Language)				3	3														
	Compulsory		流體力學(Fluid Mechanics) 物理化學(Physical Chemistry)				2	2														
	(Requires 59 Credits)		環境科學與工程概論(Introduction to Environmental Science and Engineering)				2	2	2	2												模組B、模組C Module B, Module C
			環境微生物學(Environmental Microbiology) 環境化學(Environmental Chemistry)						3	3												模組C Module C
			水質分析實驗(Water Analysis Experiment)						1	2												DATE Medic C
			實務專題研究(Special Projects Research) 環境微生物學實驗(Environmental Microbiology Experiment)				1	2	1	2	1	2			1	2						模組C Module C
			儀器分析及實驗(Instrumental Analysis and Laboratory Experiment)								3	3										模組C Module C
			工程倫理與實務講座(Special Topics on Engineering Ethics and Practice) 環境工程單元操作實驗(Experiments of Unit Operations on Environmental Engineering)												1	2	1	2				
	1		合計 Total	9 10	10	11	13	14	9	11	5	7	0	0	2	4	1	2	49			
	共同																					
	(至少應修畢8 學分)	通識選修	一、開課清冊請參考「通識課程彙總表」。 二、通識選修至少8學分(五類型,任選四類各2學分)。																			
	Common Elective (Requires at least 8 Credits)	Elective General Education courses	For the course list, please refer to the "General Education Course Curriculum Table" At least 8 credits from elective General Education courses (choose four categories from the given five categories; 2 credits for each category)																			
		院專業選修 (開設5學分)	基石專題(Cornerstone project)		1	3																
		(開政3学刀) College	頂石專題(Capstone project)								1	3										
		Professional Elective																				
		(5 Credits)	合 計 Total	0 0	1	3	0	0	0	0	1	3	0	0	0	0	0	0	2			
			普通物理(General Physics) 淨零碳排導論(Introduction to Net-Zero Carbon Emissions)	3 3			1															模組B Module B
			綠色能源概論(Introduction to Green Energy)		3	3																模組B Module B
選 修 Elective	專		工程圖學(Engineering Graphics) 噪音與振動(Noise and Vibration)		3	3	3	3														模組A Module A
	業		施工安全(Construction Safety)				3	3														模組A Module A
	應修		循環經濟導論(Introduction to Circular Economy) 工業與環境書物學(Industrial and Environmental Toxicology)				2	2	2	2												模組C Module C 模組A Module A
	畢		職業安全衛生技術特論(Special topic of occupational safety and health technology)						3	3												模組A Module A
	至少		職業安全衛生法規(Occupational Safety and Health Regulations) 溫室氣體減量與管理(Greenhouse Gas Reduction and Management)						2	2												模組A Module A 模組B、模組C Module B, Module C
	49 學	系專業選修	作業環境監測(Workplace Monitoring)								2	2										模組A Module A
	分	(開設76學分)	廢棄物處理(Solid Waste Treatment and Disposal) 碳盤查與碳足跡管理實務(Carbon inventory and carbon footprint management practices)				1				3	3										模組B、模組C Module B, Module C 模組B Module B
	Professional	Department Professional	工業通風(Industrial Ventilation)								2	2		3								
	Elective (Requires at	Elective (91 Credits)	熟處理技術(專業選修遠距教學)(Thermal Treatment Technology) 環境規劃管理(Environmental Planning and Management)		+								3	5	3	3						模組B、模組C Module B, Module C
	least 39 Credits)		空氣污染防制(Fundamentals of Air Pollution)												3	3						模組B Module B
	Cicults)		環境保護法規(Environmental Protection Regulations) 污水工程(Wastewater Engineering)		+										3	3						模組B Module B 模組B、模組C Module B, Module C
			大數據分析在環境工程上的應用(The Application of Data Mining in the Environmental Engineering)												3	3						
			廢棄物分析實驗(Waste Analysis Experiment) 廢棄物資源化工程(Waste Resourcization Engineering)				1								1	2	3	3				模組C Module C 模組C Module C
			下水道工程設計(Sewer Engineering Design)														3	3				
			工程數學(二)(Engineering Mathematics (2)) 土壤與地下水污染整治概論(Introduction to Soil and Groundwater Pollution Remediation)				1										3	3				模組B Module B
			室内空転品質(Indoor Air Quality) 澤孝技術與無源管理(ver-Zero Carbon Emission Technologies and Energy Management)														3	3				模組B Module B
			净零技術與能源管理(Net-Zero Carbon Emission Technologies and Energy Management) 合 計 Total	5 5	6	6	8	8	10	10	10	10	3	3	16	17	18	18	76			快報DD MICHIE D

- 備註

 1 修畢第二專長學分學程者:最低畢業學分結構調整為共同必修42學分,通識選修至少8學分伍類型,任選四類各2學分,專業必修40學分,專業選修40學分,各計148學分;已修畢之第二專長學分學程外系學分,採計為系專業選修學分。
 2 修畢跨領城學分學程者:最低畢業學分結構調整為共同必修42學分,通識選修至少8學分伍類型,任選四類各2學分),專業必修40學分,專業選修40學分,各計148學分;已修畢之第二專長學分學程外系學分,採計為系專業選修學分。
 3 已申請審資能源電池林柱與預去、網方合等英班各可畢業分學表工修學方與五項之。任選四類各學分,專業證修40學分,專業證修40學分,合計148學分;已修畢之阿須城學分學程外系學分,採計為系專業選修學分。
 4 每學期選課上限為 27 學分,一至二年級不得少於16學分,三至四年級不得少於9學分。
 5 專業畢業門電:取得本系專業能力畢業門艦之兩轉業點所訂定之專業證照。
 6 必修鑑的(三),於大二至大四,接與應項項發學。
 7 系上學程模組分為職業安全衛生管理(模組A)、淨等線排與永續管理跨領域學分學程(模組B)、循環經濟跨領域學分學程(模組C)。其中職業安全衛生管理(模組A)、淨等線排與永續管理跨領域學分學程(模組B)、循環經濟跨領域學分學程(模組C)。其中職業安全衛生管理(模組A),專業選修大門課程還修五門課程。其他模組需修滿合作科系專業課程6學分,專業核心課程14學分。

- Course Catalog Remarks

 1 Students who have completed a second-specialization credit program: The minimum graduation credit structure is adjusted as follows: 42 credits from common required courses, at least 8 credits from elective General Education courses (choose four categories from the given five categories; 2 credits for each category), and 49 credits from major required, 49 credits from elective credits.

 2 Students who have completed an interdiscipilinary credit program. The minimum graduation credit structure is adjusted as follows: 42 credits from common required courses, at least 8 credits from elective credits.

 2 Students who have completed an interdiscipilinary credit program. The minimum graduation credit program credits carned from other departments are calculated as the Departments major elective credits.

 3 Students who have applied for Bachelor Program in Energy and Battery Technology, College of Environment and Resources, College of Environment and Resources, must complete at least 30 credits from elective courses for Materials Engineering/Chemical Engineering/Chemi

 - 7 The department's program modules are divided into three categories: Occupational Safety and Health Management (Module A), Interdisciplinary Credit Program in Net-Zero Carbon Emissions and Sustainable Management (Module B), and Interdisciplinary Credit Program in Circular Economy (Module C).