

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校課程委員會會議審議通過

114/06/03院課程委員會會議審議通過

114/01/16系課程委員會會議審議通過

Examination at School Curriculum Committee Meeting on March 4,2025

Examination at College Curriculum Committee Meeting on June 03,2025

Examination at Department Curriculum Committee Meeting on January 16,2025

			科目名稱 Course Name	一上 Grade 1 First Semester		一下 Grade 1 Second Semester		二上 Grade 2 First Semester		二下 Grade 2 Second Semester		三上 Grade 3 First Semester		三下 Grade 3 Second Semester		四上 Grade 4 First Semester		四下 Grade 4 Second Semester		選課 條件 Course Selection Conditions	每班人數 Number of Class		備註 Remarks
				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	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours		上限 Upper Limit	下限 Lower Limit	
必修 Compulsory	共同 (42學分) Common Compulsory (Requires 42 Credits)	基礎課程 (22學分) Basic Course (22Credits)	文學鑑賞與情意表達(Appreciation of Literature and Emotional Expression)	2	2																		
			永續發展與社會實踐(Sustainable Development and Social Practice)	1	1																		
			生活與職場英文(English for Life and Business)	3	3	3	3																
			全民國防教育軍事訓練(All-out Defense Education Military Training)	0.5	2	0.5	2																
			體育(Physical Education)	1	2	1	2	1	2	1	2												
			藝文涵養與社會參與(Art Literacy and Social Participation)			2	2																
			歷史思維與多元文化領域(Historical Thinking and Multicultural Studies)					2	2														
			英語聽講(Aural-Oral English)					1	2	1	2												
			英文實務(一)-(二)(Practical English)													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) Core Course (2 Credits)	大學之道(The Goal of University Education)	1	2																		
			設計思考(Design Thinking)			1	1																
			合 計 Total	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2			
	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									「專業研究實習前素養訓練」、「海外交換學習前素養訓練」、「工讀實務實習前素養訓練」課程三擇一修課"Choose one course to take from "Pre-Professional Research Practicum Training", "Pre-Overseas Exchange Learning Training", or "Pre-Work-study Practicum Training."	
			多元學習模組(一)(Multimodal Learning Module I)											4	40							「工讀實務實習(一)」、「專業研究實習(一)」、「海外交換學習(一)」課程三擇一修課"Choose 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)」、「專業研究實習(二)」、「海外交換學習(二)」課程三擇一修課"Choose 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)」、「專業研究實習(三)」、「海外交換學習(三)」課程三擇一修課"Choose one course to take from "Work-study Practicum (III), "Professional Research Practicum (III), or "Overseas Exchange Learning (III)."	
			多元學習模組(四)(Multimodal Learning Module IV)											5	40							「工讀實務實習(四)」、「專業研究實習(四)」、「海外交換學習(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)."	
			合 計 Total	0	0	0	0	0	0	0	0	1	1	17	160	0	0	0	0	18			
	專業 (49學分) Professional Compulsory (Requires 59 Credits)	院專業必修 (0學分) College Professional Compulsory (0 Credits)	環資學院未開設共同必修課程 College does not offer compulsory courses																				
			合 計 Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		系專業必修 (49學分) Department Professional Compulsory (59 Credits)	普通化學(General Chemistry)	3	3																		模組A Module A
			工業安全(Industrial Safety)	2	2																		
			電腦在環境工程上的應用(Application of Computer on Environmental Engineering)	1	2																		
			微積分(Calculus)	3	3	3	3																
			普通化學實驗(General Chemistry Experiment)			1	2																
			有機化學(Organic Chemistry)			2	2																
			工業衛生(Industrial Hygiene)			2	2																模組A Module A
			質能均衡(Mass and Energy Balances)			2	2																
			工程數學(一)(Engineering Mathematics (I))					3	3														
			工程統計與程式語言(Engineering Statistics and Programming Language)					3	3														
			流體力學(Fluid Mechanics)			2	2																
			物理化學(Physical Chemistry)			2	2																
			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)					3	3														
			環境化學(Environmental Chemistry)					2	2														模組C Module C
			水質分析實驗(Water Analysis Experiment)					1	2														
			實務專題研究(Special Projects Research)					1	2	1	2	1	2			1	2						
			環境微生物學實驗(Environmental Microbiology Experiment)							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)													1	2						
			環境工程單元操作實驗(Experiments of Unit Operations on Environmental Engineering)															1	2				
			合 計 Total	9	10	10	11	13	14	9	11	5	7	0	0	2	4	1	2	49			
選修 Elective	共同 (至少應修畢8學分) Common Elective (Requires at least 8 Credits)	通識選修 Elective General Education courses	一、開課清單請參考「通識課程彙整表」。 二、通識選修至少8學分（五類型，任選四類各2學分）。 1. For the course list, please refer to the "General Education Course Curriculum Table" 2. At least 8 credits from elective General Education courses (choose four categories from the given five categories; 2 credits for each category)																				
			合 計 Total	0	0	1	3	0	0	0	0	1	3	0	0	0	0	0	0	2			
	專業 (應修畢至少49學分) Professional Elective (Requires at least 39 Credits)	院專業選修 (開設5學分) College Professional Elective (5 Credits)	基石專題(Cornerstone project)			1	3																
			頂石專題(Capstone project)									1	3										
			合 計 Total	0	0	1	3	0	0	0	0	1	3	0	0	0	0	0	0	2			
		系專業選修 (開設76學分) Department Professional Elective (91 Credits)	普通物理(General Physics)	3	3																		模組B Module B
			淨零碳排導論(Introduction to Net-Zero Carbon Emissions)	2	2																		模組B Module B
			綠色能源概論(Introduction to Green Energy)			3	3																
			工程圖學(Engineering Graphics)			3	3																
			噪音與振動(Noise and Vibration)				3	3															模組A Module A
			施工安全(Construction Safety)				3	3															模組A Module A
			循環經濟導論(Introduction to Circular Economy)				2	2															模組C Module C
			工業與環境毒物學(Industrial and Environmental Toxicology)							2	2												模組A Module A
			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
			職業安全衛生法規(Occupational Safety and Health Regulations)							2	2												模組A Module A
			溫室氣體減量與管理(Greenhouse Gas Reduction and Management)							3	3												模組B・模組C Module B, Module C
			作業環境監測(Workplace Monitoring)									2	2										模組A Module A
			廢棄物處理(Solid Waste Treatment and Disposal)									3	3										模組B・模組C Module B, Module C
			碳盤查與碳足跡管理實務(Carbon inventory and carbon footprint management practices)									3	3										模組B Module B
			工業通風(Industrial Ventilation)									2	2										
			熱處理技術(專業選修進距教學)(Thermal Treatment Technology)											3	3								
			環境規劃管理(Environmental Planning and Management)													3	3						模組B・模組C Module B, Module C
			空氣污染防治(Fundamentals of Air Pollution)													3	3						模組B Module B
			環境保護法規(Environmental Protection Regulations)													3	3						模組B Module B
			污水工程(Wastewater Engineering)													3	3						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)													1	2						模組C Module C
			廢棄物資源化工程(Waste Resourcization Engineering)															3	3				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))															3	3				
			土壤與地下水污染整治概論(Introduction to Soil and Groundwater Pollution Remediation)															3	3				模組B Module B
			室內空氣品質(Indoor Air Quality)															3	3				
			淨零技術與能源管理(Net-Zero Carbon Emission Technologies and Energy Management)															3	3				模組B Module B
			合 計 Total	5	5	6	6	8	8	10	10	10	10	3	3	16	17	18	18	76			