

**中臺科技大學大學部四年制日間部環境與安全衛生工程系114學年度入學課程標準表(國際學生產學合作專班)**  
**Central Taiwan University of Science and Technology Undergraduate 4-Year Daytime Program Department of Safety Health and Environmental Engineering Curriculum Standards for the 114<sup>th</sup> Acadmic Year (International Student Industry-Academia Collaboration Program)**

1140306 系課程委員會會議通過

1140311 院課程委員會會議通過

1140319 校課程委員會會議通過

1140912 系課程委員會會議通過

學年 Academic Year	科目 Course	學分數 Credits	時數 Teaching hours	上學期 First Semester		下學期 Second Semester		備註 Remarks
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
校訂必修(30學分) School-developed Required Courses (30 Credits)								
第一學年 1 <sup>st</sup> Academic Year	華語課程(一) Chinese Language (I)	4	6	6				
	應用華語(一) Applied Chinese (I)	2	4	4				
	大一英文(一) Freshman English (I)	2	2	2				
	體育(一) Physical Education (I)	1	2	2				
	華語課程(二) Chinese Language (II)	4	4			4		
	應用華語(二) Applied Chinese (II)	2	2			2		
	大一英文(二) Freshman English (II)	2	2			2		
	體育(二) Physical Education (II)	1	2			2		
第二學年 2 <sup>nd</sup> Academic Year	進階華語(一) Advanced Chinese Language (I)	2	2	2				
	資訊科技與AI應用 Information Technology and AI Application	2	2	2				電腦課程 Computer Course
	自然領域 Natural Studies	2	2	2				
	進階華語(二) Advanced Chinese Language (II)	2	2			2		
	文化領域 Cultural Studies	2	2			2		
	社會領域 Soical Studies	2	2			2		
專業必修(70學分) Professional Required Courses (70 Credits)								
核心基礎(27學分) Core Foundations (27 Credits)								
第一學年 1 <sup>st</sup> Academic Year	普通化學 General Chemistry	2	2	2				
	化學實驗 General Chemistry Laboratory	1	2	2				
	微積分 Calculus	3	3	3				
	工程倫理 Engineering Ethics	1	1	1				定錨課程 Anchoring Course

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第一學年 1 <sup>st</sup> Academic Year	環境工程概論 Introduction to Environmental Engineering	2	2	2				
	工業安全 Industrial Safety	2	2	2				
	進階化學 Advanced Chemistry	2	2			2		
	進階化學實驗 Advanced Chemistry Laboratory	1	2			2		
	工業衛生 Industrial Hygiene	2	2			2		
	噪音與振動 Noise and Vibration	2	2			2		
	電工學 Electrical Engineering	2	2			2		
第二學年 2 <sup>nd</sup> Academic Year	環境化學 Environmental Chemistry	3	3	3				
	流體力學 Fluid Mechanics	2	2	2				
	統計學 Statistics	2	2	2				電腦課程 Computer Course
核心專業(43學分) Core Professional Courses (43 Credits)								
第二學年 2 <sup>nd</sup> Academic Year	電腦圖學與實作 Computer Aided Design and Graphing and Operating	2	4	4				電腦課程 Computer Course
	職業安全衛生法規 Occupational Safety and Health Act	2	2	2				
	給水工程 Water Supply Engineering	3	3			3		
	水質分析 Water and Wastewater Analysis	2	2			2		
	水質分析實驗 Water and Wastewater Analysis Laboratory	2	4			4		
	工業通風 Industrial Ventilation	2	2			2		
第三學年 3 <sup>rd</sup> Academic Year	污水工程 Wastewater Engineering	3	3	3				
	空氣污染控制 Air Pollution Control	3	3	3				
	環境規劃管理 Environmental Planning and Management	2	2	2				
	工業安全工程 Industrial Safety Engineering	2	2	2				
	作業環境測定 Monitoring of Working Environment	3	3	3				
	廢棄物處理與設計 Solid Waste Management	3	3			3		
	環境污染物分析 Analysis of Enviromental Pollutants	2	2			2		
	人因工程 Ergonomics	2	2			2		
	風險評估 Risk Assessment	2	2			2		
	施工安全 Construction Safety	2	2			2		

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第四學年 4 <sup>th</sup> Academic Year	實務實習(一) Practical Training (I)	4	8		8			校外實習8週 Off-Campus Internship Internship Duration:8weeks
	實務實習(二) Practical Training (II)	2	4				4	校外實習4週 Off-Campus Internship Internship Duration:4weeks
專業選修(74學分) Professional Electives Courses (74 Credits)								
第一學年 1 <sup>st</sup> Academic Year	化學品安全實作 Chemical Safety Practice	1	2	2				
	質能均衡 Material and Energy Balance	2	2			2		
	有機化學 Organic Chemistry	2	2			2		
	電氣安全實作 Electrical Safety Practice	1	2			2		
第二學年 2 <sup>nd</sup> Academic Year	能源科技 Energy Technology	2	2	2				
	環境微生物學 Environmental Microbiology	2	2	2				
	環境微生物學實驗 Environmental Microbiology Laboratory	1	2	2				
	防火防爆 Fire and Explosion Prevention	2	2	2				
	火災學 Fire Dynamics	2	2	2				
	水文學 Hydrology	2	2			2		
	環境工程單元操作 Unit Operations in Environmental Engineering	2	2			2		
	環境工程單元操作實驗 Unit Operations in Environmental Engineering Laboratory	1	2			2		
	低碳管理 Low Carbon Management	2	2			2		
	消防法規 Law and Regulations of Fire Protection	2	2			2		
第三學年 3 <sup>rd</sup> Academic Year	儀器分析 Instrumental Analysis	2	2	2				
	儀器分析實驗 Instrumental Analysis Laboratory	2	4	4				
	作業環境測定實驗 Monitoring of Working Environment Laboratory	2	4	4				
	地下水污染防治 Groundwater Pollution Abatement	2	2	2				
	環境保護法規 Law and Regulations of Environmental Protection	2	2			2		
	工業安全管理 Industrial Safety Management	2	2			2		
	書報討論 Seminar	1	1			1		

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第三學年 3 <sup>rd</sup> Academic Year	施工架作業暨施工計畫書撰寫實作 Scaffold Set Up Practice and Construction Planning Exercises	2	4			4		
	風險評估實作 Risk Assessment Practice	1	2			2		
	作業環境控制工程 Environmental Control for Working Place	2	2			2		
第四學年 4 <sup>th</sup> Academic Year	專業實習(一) Specialty Training (I)	8	16		16			校外實習16週 Off-Campus Internship Internship Duration:16weeks
	環境影響評估 Environmental Impact Assessment	2	2	2				
	有害廢棄物管理 Hazardous Waste Management	2	2	2				
	衛生管理實務 Practice of Industrial Health Management	2	2	2				
	水系統消防安全設備 Fire Safety Equipment - Water System	2	2	2				
	製程安全 Process Safety	2	2			2		
	AI在環安衛的應用 Application of AI in Safety, Health and Environmental Engineering	2	2			2		AI課程 AI Course
	機械安全實作 Machine Safety Practice	1	2			2		
	勞動檢查實務 Practice of Workplace Inspection	2	2			2		
	化學系統消防安全設備 Fire Safety Equipment - Chemical System	2	2			2		
	警報與避難系統消防安全設備 Fire Safety Equipment - Alarm and Evacuation System	2	2			2		
專業實習(二) Specialty Training (II)	5	10				10	校外實習10週 Off-Campus Internship Internship Duration:10weeks	
第一學年小計(1) 1 <sup>st</sup> Academic Year Credits Subtotal (1)		44	54	28	0	26	0	
第二學年小計(2) 2 <sup>nd</sup> Academic Year Credits Subtotal (2)		50	56	29	0	27	0	
第三學年小計(3) 3 <sup>rd</sup> Academic Year Credits Subtotal (3)		42	49	25	0	24	0	
第四學年小計(4) 4 <sup>th</sup> Academic Year Credits Subtotal (4)		38	58	8	24	12	14	
合計 Total = (1)+(2)+(3)+(4)		174	217	90	24	89	14	

### 畢業規定及其他相關說明：

## Graduation Requirements and Other Relevant Instructions

一	<p>最低畢業學分為128學分，必修100學分【含校訂必修30學分、專業必修70學分】，選修至少28學分（其中專業選修至少18學分）。</p> <p>The minimum graduation requirement is 128 credits, including mandatory 100 credits [ school-developed required courses 30 credits, and mandatory professional 70 credits]. Elective credits must be at least 28 credits [ with a minimum number of 18 credits for professional electives].</p>
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二	畢業前須修習健康科學院院定共同課程：統計學「Statistics」2學分，需有修讀紀錄且及格，始得畢業。 Prior to graduation, students must complete the core course "Statistics" designated by the College of Health Science, which is worth 2 credits. Completion record and passing grade are required for graduation.							