

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 114th 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
1141007 院課程委員會會議通過
1141015 校課程委員會會議通過
1141030 系課程委員會會議通過
1141119 教務會議通過

| 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(28學分) School-developed Required Courses (28 Credits) | | | | | | | | |
| 第一學年 1 st Academic Year | 華語課程(一) Chinese Language (I) | 3 | 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) | 3 | 6 | | | 6 | | |
| | 應用華語(二) Applied Chinese (II) | 2 | 4 | | | 4 | | |
| | 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 nd 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(68學分) Professional Required Courses (68 Credits) | | | | | | | | |
| 核心基礎(29學分) Core Foundations (29 Credits) | | | | | | | | |
| 第一學年 1 st Academic Year | 普通化學 General Chemistry | 2 | 2 | 2 | | | | |
| | 化學實驗 General Chemistry Laboratory | 2 | 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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|---|--|----------------|----------------------|-----------------------|------------------|------------------------|------------------|-------------------------|
| | | | | 授課 Teaching | 實習 Internship | 授課 Teaching | 實習 Internship | |
| 第一學年 1 st 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 | 2 | 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 nd 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(39學分) Core Professional Courses (39 Credits) | | | | | | | | |
| 第二學年 2 nd 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 rd 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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| | | | | 授課 Teaching | 實習 Internship | 授課 Teaching | 實習 Internship | |
| | 實務實習(一) Practical Training (I) | <u>1</u> | <u>2</u> | | | | <u>2</u> | 校外實習40小時 Off-Campus Internship Duration: 40 hours |
| 第四學年 4 th Academic Year | 實務實習(二) Practical Training (II) | <u>1</u> | <u>2</u> | | <u>2</u> | | | 校外實習40小時 Off-Campus Internship Duration: 40 hours |
| 專業選修(91學分) Professional Electives Courses (91 Credits) | | | | | | | | |
| 第一學年 1 st 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 nd 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 rd 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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| | | | | 授課 Teaching | 實習 Internship | 授課 Teaching | 實習 Internship | |
| 第三學年 3 rd 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 th Academic Year | 專業實習(一) Specialty Training (I) | 16 | 16 | | 16 | | | 校外實習640小時 Off-Campus Internship Duration: 640 hours |
| | 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) | 14 | 14 | | | | 14 | 校外實習560小時 Off-Campus Internship Duration: 560 hours |
| 第一學年小計(1) 1 st Academic Year Credits Subtotal (1) | | 44 | 58 | 28 | 0 | 30 | 0 | |
| 第二學年小計(2) 2 nd Academic Year Credits Subtotal (2) | | 50 | 56 | 29 | 0 | 27 | 0 | |
| 第三學年小計(3) 3 rd Academic Year Credits Subtotal (3) | | 43 | 51 | 25 | 0 | 24 | 2 | |
| 第四學年小計(4) 4 th Academic Year Credits Subtotal (4) | | 50 | 52 | 8 | 18 | 12 | 14 | |
| 合計 Total = (1)+(2)+(3)+(4) | | 187 | 217 | 90 | 18 | 93 | 16 | |

畢業規定及其他相關說明：

Graduation Requirements and Other Relevant Instructions

| 學年 Academic Year | 科目 Course | 學分數 Credits | 時數 Teaching hours | 上學期 | | 下學期 | | 備註 Remarks |
|---------------------|--|----------------|----------------------|----------------|------------------|-----------------|------------------|---------------|
| | | | | First Semester | | Second Semester | | |
| | | | | 授課 Teaching | 實習 Internship | 授課 Teaching | 實習 Internship | |
| 一 | 最低畢業學分為128學分，必修 <u>96</u> 學分【含校訂必修 <u>28</u> 學分、專業必修 <u>68</u> 學分】，選修至少 <u>32</u> 學分（其中專業選修至少 <u>22</u> 學分）。 The minimum graduation requirement is 128 credits, including mandatory <u>96</u> credits [school-developed required courses <u>28</u> credits, and mandatory professional <u>68</u> credits]. Elective credits must be at least <u>32</u> credits [with a minimum number of <u>22</u> credits for professional electives]. | | | | | | | |
| 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. | | | | | | | |