

111學年度大仁科技大學四技日間部消防安全學士學位學程課程表（中英對照版／Chinese-English Bilingual Version）

2022 Tajen University 4-Year Undergraduate Program, Bachelor Degree Program of Fire Safety

科目類別 Course Type	條件群組 Recommended Year	科目名稱 Course Title	模組名稱 Module Name	開課 Course			第1學年 Academic Year 1				第2學年 Academic Year 2				第3學年 Academic Year 3				第4學年 Academic Year 4				備註 Memo
				學分 Cs	時數 Hr	項目 Rs	第一學期 1st Semester 授課 Le	實習 Lb	第二學期 2nd Semester 授課 Le	實習 Lb	第一學期 1st Semester 授課 Le	實習 Lb	第二學期 2nd Semester 授課 Le	實習 Lb	第一學期 1st Semester 授課 Le	實習 Lb	第二學期 2nd Semester 授課 Le	實習 Lb	第一學期 1st Semester 授課 Le	實習 Lb	第二學期 2nd Semester 授課 Le	實習 Lb	
通識必修 Required General Courses	1年級第1學期必修 Y1-S1 Required	[000001137] 體育I Physical Education I		2	2	1	2	0															
通識必修 Required General Courses	1年級第1學期必修 Y1-S1 Required	[000001147] 社團學習與實作I Learning and Practice of Clubs I		1	1	1	1	0															
通識必修 Required General Courses	1年級第1學期必修 Y1-S1 Required	[000001153] 生活情境英文I English for Daily Conversation I		2	2	1	2	0															
通識必修 Required General Courses	1年級第1學期必修 Y1-S1 Required	[000001008] 中文閱讀與書寫I Chinese Reading and Writing I		2	2	1	2	0															
通識必修 Required General Courses	1年級第1學期必修 Y1-S1 Required	[000001136] 勞動教育 Work Education		1	2	1	2	0															
通識必修 Required General Courses	1年級第2學期必修 Y1-S2 Required	[000001148] 社團學習與實作II Learning and Practice of Clubs II		1	1	1			1	0													
通識必修 Required General Courses	1年級第2學期必修 Y1-S2 Required	[000001009] 中文閱讀與書寫II Chinese Reading and Writing II		2	2	1			2	0													
通識必修 Required General Courses	1年級第2學期必修 Y1-S2 Required	[000001138] 體育II Physical Education II		2	2	1			2	0													
通識必修 Required General Courses	1年級第2學期必修 Y1-S2 Required	[000001154] 生活情境英文II English for Daily Conversation II		2	2	1			2	0													
通識必修 Required General Courses	2年級第1學期必修 Y2-S1 Required	[000000021] 創意思考與應用 Creative Thinking and Application		2	2	1					2	0											
通識必修 Required General Courses	2年級第1學期必修 Y2-S1 Required	[000001150] 服務學習教育 Service Learning		1	1	1					1	0											
通識必修 Required General Courses	2年級第1學期必修 Y2-S1 Required	[000001205] 大學社會責任與實踐 University Social Responsibility and Practice		2	2	1					2	0											
通識必修 Required General Courses	2年級第2學期必修 Y2-S2 Required	[000001146] 程式設計與邏輯運算 Program Design and Logical Calculus		2	2	1							2	0									
通識必修 Required General Courses	2年級第2學期必修 Y2-S2 Required	[000001010] 公民與社會 Citizenship and Society		2	2	1							2	0									
通識必修 Required General Courses	2年級第2學期必修 Y2-S2 Required	[000001168] 通用職場英文 General Workplace English		2	2	1							2	0									
通識必修 小計 Subtotal		(畢業須修學分數：26) (Required for Graduation: 26 Credits)		26	27	15	9	0	7	0	5	0	6	0	0	0	0	0	0	0	0		
通識選修 General Elective Courses	1年級第1學期選修 Y1-S1 Elective	[000000043] 全民國防教育軍事訓練I All-out Defense Education Military Training I		0	2	1	2	0															
通識選修 General Elective Courses	1年級第2學期選修 Y1-S2 Elective	[000000044] 全民國防教育軍事訓練II All-out Defense Education Military Training II		0	2	1			2	0													
通識選修 General Elective Courses	2年級第1學期選修 Y2-S1 Elective	[000000045] 全民國防教育軍事訓練III All-out Defense Education Military Training III		0	2	1					2	0											
通識選修 General Elective Courses	2年級第2學期選修 Y2-S2 Elective	[000000046] 全民國防教育軍事訓練IV All-out Defense Education Military Training IV		0	2	1							2	0									
通識選修 General Elective Courses	3年級第1學期選修 Y3-S1 Elective	[000001000] 藝術人文領域 The Field of Arts and Humanities		2	2	1								2	0								
通識選修 General Elective Courses	3年級第1學期選修 Y3-S1 Elective	[000000047] 全民國防教育軍事訓練V All-out Defense Education Military Training V		0	2	1								2	0								
通識選修 General Elective Courses	3年級第2學期選修 Y3-S2 Elective	[000000018] 社會科學領域 The Field of Social Science		2	2	1											2	0					
通識選修 General Elective Courses	4年級第1學期選修 Y4-S1 Elective	[000000017] 自然科學領域 The Field of Natural Science		2	2	1													2	0			
通識選修 小計 Subtotal		(畢業須修學分數：6) (Required for Graduation: 6 Credits)		6	16	8	2	0	2	0	2	0	2	0	4	0	2	0	2	0	0	0	
院訂必修 College Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4000020] 生物學 Biology		2	2	1	2	0															
院訂必修 College Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4000010] 化學 Chemistry		2	2	1	2	0															
院訂必修 College Required Courses	1年級第2學期必修 Y1-S2 Required	[DP4000003] 生理學 Physiology		2	2	1			2	0													
院訂必修 College Required Courses	2年級第1學期必修 Y2-S1 Required	[DP4000039] 職場倫理 Career Ethics		2	2	1					2	0											

科目類別 Course Type	條件群組 Recommended Year	科目名稱 Course Title	模組名稱 Module Name	開課 Course			第1學年 Academic Year 1				第2學年 Academic Year 2				第3學年 Academic Year 3				第4學年 Academic Year 4				備註 Memo
				學分 Cs	時數 Hr	項目 Rs	第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		
院訂必修 College Required Courses	2年級第2學期必修 Y2-S2 Required	[DP4000023] 生物統計 Biostatistics		2	2	1							2	0									
院訂必修 小計 Subtotal		(畢業須修學分數：10) (Required for Graduation: 10 Credits)		10	10	5	4	0	2	0	2	0	2	0	0	0	0	0	0	0	0		
跨領域必修 Required Courses Offered in Other Departments	1年級第2學期必修 Y1-S2 Required	[000001182] 跨領域I Cross-Disciplinary Program I		2	2	1				2	0												
跨領域必修 Required Courses Offered in Other Departments	2年級第1學期必修 Y2-S1 Required	[000001183] 跨領域II Cross-Disciplinary Program II		2	2	1					2	0											
跨領域必修 Required Courses Offered in Other Departments	2年級第2學期必修 Y2-S2 Required	[000001184] 跨領域III Cross-Disciplinary Program III		2	2	1						2	0										
跨領域必修 Required Courses Offered in Other Departments	3年級第1學期必修 Y3-S1 Required	[000001185] 跨領域IV Cross-Disciplinary Program IV		2	2	1								2	0								
跨領域必修 小計 Subtotal		(畢業須修學分數：8) (Required for Graduation: 8 Credits)		8	8	4	0	0	2	0	2	0	2	0	2	0	0	0	0	0	0		
專業必修 Departmental Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4500153] 電工學 Electrical Technology		3	3	1	3	0															
專業必修 Departmental Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4500148] 消防法規I Law and Regulations of Fire Protection I		2	2	1	2	0															
專業必修 Departmental Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4500112] 火災學I Fire ScienceI		2	2	1	2	0															
專業必修 Departmental Required Courses	1年級第1學期必修 Y1-S1 Required	[DP4500121] 實務專題I Special ProjectsI		1	1	1	0	1															
專業必修 Departmental Required Courses	1年級第2學期必修 Y1-S2 Required	[DP4500001] 物理 General Physics		2	2	1			2	0													
專業必修 Departmental Required Courses	1年級第2學期必修 Y1-S2 Required	[DP4500149] 消防法規II Law and Regulations of Fire Protection II		2	2	1			2	0													
專業必修 Departmental Required Courses	1年級第2學期必修 Y1-S2 Required	[DP4500122] 實務專題II Special ProjectsII		1	1	1			0	1													
專業必修 Departmental Required Courses	1年級第2學期必修 Y1-S2 Required	[DP4500113] 火災學II Fire ScienceII		2	2	1			2	0													
專業必修 Departmental Required Courses	2年級第1學期必修 Y2-S1 Required	[DP4500072] 水系統消防安全設備 Water Systems Fire Prevention Equipment		3	3	1					3	0											
專業必修 Departmental Required Courses	2年級第1學期必修 Y2-S1 Required	[DP4500123] 實務專題III Special ProjectsIII		1	1	1					0	1											
專業必修 Departmental Required Courses	2年級第1學期必修 Y2-S1 Required	[DP4500138] 警報系統設計 Alarm System Design		3	3	1					3	0											
專業必修 Departmental Required Courses	2年級第2學期必修 Y2-S2 Required	[DP4500124] 實務專題IV Special ProjectsIV		1	1	1							0	1									
專業必修 Departmental Required Courses	2年級第2學期必修 Y2-S2 Required	[DP4500139] 避難系統設計 Refuge System Design		3	3	1							3	0									
專業必修 Departmental Required Courses	3年級第1學期必修 Y3-S1 Required	[DP4500155] 消防圖學I Fire Protection Engineering Graphics I		2	2	1									2	0							
專業必修 Departmental Required Courses	3年級第1學期必修 Y3-S1 Required	[DP4500154] 緊急救護 Emergency Medical Service		2	2	1									2	0							
專業必修 Departmental Required Courses	3年級第1學期必修 Y3-S1 Required	[DP4500073] 化學系統消防安全設備 Chemical Systems Fire Prevention Equipment		3	3	1									3	0							
專業必修 Departmental Required Courses	3年級第1學期必修 Y3-S1 Required	[DP4500125] 實務專題V Special ProjectsV		1	1	1									0	1							
專業必修 Departmental Required Courses	3年級第2學期必修 Y3-S2 Required	[DP4500023] 防火管理 Fire Prevention Management		2	2	1											2	0					
專業必修 Departmental Required Courses	3年級第2學期必修 Y3-S2 Required	[DP4500126] 實務專題VI Special ProjectsVI		1	1	1											0	1					
專業必修 Departmental Required Courses	3年級第2學期必修 Y3-S2 Required	[DP4500028] 排煙系統設計 Fume Exhaust System Design		3	3	1											3	0					
專業必修 Departmental Required Courses	3年級第2學期必修 Y3-S2 Required	[DP4500074] 消防設備檢修實務 Fire Equipment Maintenance Practices		3	3	1											3	0					

科目類別 Course Type	條件群組 Recommended Year	科目名稱 Course Title	模組名稱 Module Name	開課 Course			第1學年 Academic Year 1				第2學年 Academic Year 2				第3學年 Academic Year 3				第4學年 Academic Year 4				備註 Memo
				學分 Cs	時數 Hr	項目 Rs	第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		
Departmental Required Courses	3年級第2學期必修 Y3-S2 Required	[DP4500156] 消防圖學II Fire Protection Engineering Graphics II		2	2	1											2	0					
Departmental Required Courses	4年級第1學期必修 Y4-S1 Required	[DP4500129] 創業實作 Practice of Entrepreneurship		2	2	1													0	2			
Departmental Required Courses	4年級第1學期必修 Y4-S1 Required	[DP4500157] 建築防火 Fire Safety of Buildings		2	2	1													2	0			
Departmental Required Courses	4年級第2學期必修 Y4-S2 Required	[DP4500117] 危險物品管理 Hazardous Materials Management		3	3	1															3	0	
專業必修 小計 Subtotal		(畢業須修學分數：52) (Required for Graduation: 52 Credits)		52	52	25	7	1	6	1	6	1	3	1	7	1	10	1	2	2	3	0	
Departmental Elective Courses	1年級第1學期選修 Y1-S1 Elective	[DP4500032] 工業毒物學 Industrial Toxicology		2	2	1	2	0															
Departmental Elective Courses	1年級第1學期選修 Y1-S1 Elective	[DP4500131] 電子學 Electronics		2	2	1	2	0															
Departmental Elective Courses	1年級第1學期選修 Y1-S1 Elective	[DP4500061] 職業安全 Occupational Safety		2	2	1	2	0															
Departmental Elective Courses	1年級第1學期選修 Y1-S1 Elective	[DP4500078] 法學緒論 Introduction to Law		2	2	1	2	0															
Departmental Elective Courses	1年級第2學期選修 Y1-S2 Elective	[DP4500079] 配線實務I Wiring PracticesI		2	2	1			2	0													
Departmental Elective Courses	1年級第2學期選修 Y1-S2 Elective	[DP4500062] 職業衛生 Occupational Hygiene		2	2	1			2	0													
Departmental Elective Courses	1年級第2學期選修 Y1-S2 Elective	[DP4500150] 化學實驗 chemical Laboratory		2	2	1			2	0													
Departmental Elective Courses	1年級第2學期選修 Y1-S2 Elective	[DP4500151] 微積分 Calculus		2	2	1			2	0													
Departmental Elective Courses	2年級第1學期選修 Y2-S1 Elective	[DP4500147] 消防水力學 Fire Hydraulics		2	2	1					2	0											
Departmental Elective Courses	2年級第1學期選修 Y2-S1 Elective	[DP4500082] 配線實務II Wiring PracticesII		2	2	1					2	0											
Departmental Elective Courses	2年級第1學期選修 Y2-S1 Elective	[D04500001] 人因工程 Human Factor Engineering		2	2	1					2	0											
Departmental Elective Courses	2年級第1學期選修 Y2-S1 Elective	[DP4500083] 風險危害評估 Risk Assessment		2	2	1					2	0											
Departmental Elective Courses	2年級第1學期選修 Y2-S1 Elective	[DP4500038] 電氣安全 Electrical Safety		2	2	1					2	0											
Departmental Elective Courses	2年級第2學期選修 Y2-S2 Elective	[DP4500134] 消防工作犬訓練 Fire Dog Training		2	2	1						2	0										
Departmental Elective Courses	2年級第2學期選修 Y2-S2 Elective	[DP4500040] 雲端防災科技 Cloud Disaster Prevention Technology		2	2	1						2	0										
Departmental Elective Courses	2年級第2學期選修 Y2-S2 Elective	[DP4500033] 熱傳學 Heat Transfer		2	2	1						2	0										
Departmental Elective Courses	2年級第2學期選修 Y2-S2 Elective	[D04500002] 都市防災 Urban Disaster Prevention		2	2	1						2	0										
Departmental Elective Courses	2年級第2學期選修 Y2-S2 Elective	[DP4500039] 感測元件 Sensing Element		2	2	1						2	0										
Departmental Elective Courses	3年級第1學期選修 Y3-S1 Elective	[DP4500152] 配管實務 Wiring Practices		2	2	1									2	0							
Departmental Elective Courses	3年級第1學期選修 Y3-S1 Elective	[DP4500048] 消防化學 Fire Chemistry		2	2	1									2	0							
Departmental Elective Courses	3年級第1學期選修 Y3-S1 Elective	[DP4500094] 專業證照輔導I Professional License Examination Guidancel		2	2	1									2	0							
Departmental Elective Courses	3年級第1學期選修 Y3-S1 Elective	[DP4500088] 工程經濟 Engineering Economics		2	2	1									2	0							
Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500097] 專業證照輔導II Professional License Examination Guidancell		2	2	1										2	0						
Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500136] 職業安全管理實務 Occupational Safety Management Practice		2	2	1										2	0						

科目類別 Course Type	條件群組 Recommended Year	科目名稱 Course Title	模組名稱 Module Name	開課 Course			第1學年 Academic Year 1				第2學年 Academic Year 2				第3學年 Academic Year 3				第4學年 Academic Year 4				備註 Memo
				學分 Cs	時數 Hr	項目 Rs	第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		第一學期 1st Semester		第二學期 2nd Semester		
專業選修 Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500095] 消防工程估價 Fire Engineering Valuation		2	2	1										2	0						
專業選修 Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500081] 應用力學 Applied Mechanics		2	2	1										2	0						
專業選修 Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500047] 營建安全 Construction Safety		2	2	1										2	0						
專業選修 Departmental Elective Courses	3年級第2學期選修 Y3-S2 Elective	[DP4500158] 冷凍空調概論 Basic Introduction of Hvac System		2	2	1										2	0						
專業選修 Departmental Elective Courses	4年級第1學期選修 Y4-S1 Elective	[DP4500100] 災害防救計畫與緊急應變計畫 Plan of Disaster Prevention and Emergency Response		2	2	1												2	0				
專業選修 Departmental Elective Courses	4年級第1學期選修 Y4-S1 Elective	[DP4500159] 企業講座 Enterprise Seminar		2	2	1												2	0				
專業選修 Departmental Elective Courses	4年級第1學期選修 Y4-S1 Elective	[DP4500092] 火災原因調查與鑑定 Fire Cause Investigation and Identification		2	2	1												2	0				
專業選修 Departmental Elective Courses	4年級第1學期選修 Y4-S1 Elective	[DP4500099] 防火防爆工程 Prevention Engineering of Fire and Explosion		2	2	1												2	0				
專業選修 Departmental Elective Courses	4年級第1學期選修 Y4-S1 Elective	[DP4500160] 校外實習 Internship		2	4	1												0	4				
專業選修 Departmental Elective Courses	4年級第2學期選修 Y4-S2 Elective	[DP4500163] 消防機械 Fire-fighting Machinery		2	2	1														2	0		
專業選修 Departmental Elective Courses	4年級第2學期選修 Y4-S2 Elective	[DP4500087] 消防製圖實作 Fire Protection Engineering Drawing Implements		2	2	1														2	0		
專業選修 Departmental Elective Courses	4年級第2學期選修 Y4-S2 Elective	[DP4500093] 職業安全衛生法規 Occupation Safety and Health Regulations		2	2	1														2	0		
專業選修 Departmental Elective Courses	4年級第2學期選修 Y4-S2 Elective	[DP4500098] 消防工程英文 Fire Protection Engineering English		2	2	1														2	0		
專業選修 Departmental Elective Courses	4年級第2學期選修 Y4-S2 Elective	[DP4500055] 消防戰術與勤務 Fire-fighting Tactics and service		2	2	1														2	0		
專業選修 小計 Subtotal		(畢業須修學分數：26) (Required for Graduation: 26 Credits)		76	78	38	8	0	8	0	10	0	10	0	8	0	12	0	8	4	10	0	
總計 Grand Total		(畢業須修總學分數：128) (Total Credits Required for Graduation: 128)		178	191	95	30	1	27	1	27	1	25	1	21	1	24	1	12	6	13	0	Total: 178 Credits / 191 Periods

註記 (中文)

- 總學分說明:最低畢業學分為128學分,包括:通識必修課程26學分【含:中文閱讀與書寫I、II,生活情境英文I、II,體育I、II,社團學習與實作I、II,勞動教育,創意思考與應用,歷史與文化及服務學習教育,程式設計與邏輯運算,通用職場英文,公民與社會】;通識選修課程6學分,3個領域每個領域至少修2學分【含:藝術人文領域、社會科學領域、自然科學領域】;院訂必修10學分,跨領域8學分,專業必修52學分,專業選修至少26學分(含承認外系課程12學分,不含通識課程)。
- 全民國防教育軍事訓練(I、II、III、IV、V)為選修,各為0學分/2小時,共計0學分/8小時;體育(I及II) 為必修,各為2學分/2小時,共計4學分/4小時;社團實作與學習一年級(I及II) 為必修,各為1學分/1小時,共計2學分/2小時;勞動教育一年級為必修1學分/2小時;服務學習教育二年級為必修1學分/1小時;英文能力分級教學,分成A、B、C三級。
- 實習說明:校外實習2學分,為選修,至少實習時數320小時。
- 各年級學分說明:一至三年級每學期至少修16學分,最多修25學分;四年級每學期至少修9學分,最多修25學分。
- 畢業門檻與配套措施說明: (1)英文能力須通過英檢初級,未通過者,可選修「英文檢定」初級課程,其成績合格者始得認列,請參考本校英文檢定課程實施要點。 (2)專業能力須通過下列專業證照或考試及格之一。 (一)內政部消防署核定之防火管理或消防安全管理相關專業證照。 (二)行政院勞工委員會核定之勞工安全衛生管理相關專業證照。 (三)內政部營建署核定之建築物室內裝修相關專業證照。 (四)考試院考選部舉辦之相關專業考試及格。 (五)衛生福利部核定之緊急救護技術員相關專業證照。 專業能力配套措施請參考本系學生畢業門檻規畫表。

Notes (English)

- Total Credit Requirements The minimum number of credits required for graduation is 128 credits, including: 26 credits of General Education Required Courses, including: Chinese Reading and Writing I & II English in Everyday Life I & II Physical Education I & II Club Learning and Practice I & II Labor Education Creative Thinking and Application History and Culture and Service-Learning Education General Workplace English Citizenship and Society 6 credits of General Education Elective Courses. Students must complete at least 2 credits in each of the following three areas: Arts and Humanities Social Sciences Natural Sciences 10 credits of College Required Courses 8 credits of Interdisciplinary Courses 52 credits of Major Required Courses At least 26 credits of Major Elective Courses, including up to 12 credits of courses recognized from other departments, excluding General Education courses.
- Additional Course Requirements All-Out Defense Education Military Training I, II, III, IV, and V are elective courses. Each course carries 0 credits / 2 hours, for a total of 0 credits /8 hours. Physical Education I & II are required courses. Each course carries 2 credits / 2 hours, for a total of 4 credits / 4 hours. Club Learning and Practice I & II (First Year) are required courses. Each course carries 1 credit / 1 hour, for a total of 2 credits / 2 hours. Labor Education (First Year) is a required course carrying 1 credit / 2 hours. Service-Learning Education (Second Year) is a required course carrying 1 credit / 1 hour. English proficiency courses are offered according to placement levels, divided into Levels A, B, and C.
- Internship Requirement Off-campus Internship is an elective course carrying 2 credits. Students are required to complete at least 320 hours of internship.
- Credit Requirements by Academic Year First to Third Year: Students must take at least 16 credits and no more than 25 credits per semester. Fourth Year: Students must take at least 9 credits and no more than 25 credits per semester.
- Graduation Requirements and Supporting Measures (1) English Proficiency Requirement Students must pass the Elementary Level of the General English Proficiency Test (GEPT). Students who do not pass the required level may enroll in the Elementary English Certification course. The course may be recognized toward the graduation requirement only after the student successfully completes the course. For details, please refer to the University's Guidelines for the Implementation of English Certification Courses. (2) Professional Competency Requirement Students must obtain at least one of the following professional licenses/certifications or pass one of the following professional examinations: A professional certification related to Fire Prevention Management or Fire Safety Management approved by the National Fire Agency, Ministry of the Interior. A professional certification related to Occupational Safety and Health Management approved by the Council of Labor Affairs, Executive Yuan. A professional certification related to Building Interior Decoration approved by the Construction and Planning Agency, Ministry of the Interior. Passing a relevant professional examination administered by the Ministry of Examination. A professional certification related to Emergency Medical Technician (EMT) approved by the Ministry of Health and Welfare. For details regarding the supporting measures for professional competency, please refer to the Department's Graduation Requirement Planning Table for Students.