附件11

慈濟科技大學112學年度四年制資訊科技與管理系開課科目及學分時數表
Tzu Chi University of Science and Technology
Bachelor's Degree Program in the Department of Information Technology and Management (IT&M), 128 credits, Fall 2023

Category 科目類別	Course Title in Chinese 課程中文名稱	Course Title in English 課程英文名稱	Credits 學分	Hours 時數	Year 1 1st Semester	Year 1 2nd Semester	Year 2 1st Semester	Year 2 2nd Semester	Year 3 1st Semester	Year 3 2nd Semester	Year 4 1st Semester	Year 4 2nd Semester	Note
Basic General Courses (Required) 基礎通識 (必修)	國文	Chinese	4	4	2	2							10 credits required
	英文	English	4	8	1	1	1	1					
	邏輯與運算思維	Logic and Computational Thinking	2	2		2							
	慈濟人文	Tzu-Chi Philosophy	2	2		2							
	勞作教育(一)	Labor Education I	0	2	0								
	勞作教育(二)	Labor Education II	0	2		0							
	體育	Physical Education	0	8	0	0	0	0					
	小計	**Total Credits**	**12**	**28**	**3**	**7**	**1**	**1**					
Core General Courses (Required) 核心通識 (必修)	**人文與藝術向度(Humanities and Arts)**												
	語文應用與表達	The Expression & Application of Chinese Language & Literature	2	2	2								2 credits required
	生命教育	Life Education	2	2	2								
	音樂欣賞	Music Appreciation	2	2	2								
	公民素養向度(Civic Literacy)												
	憲法與人權	Constitution and Human Rights	2	2	2								2 credits required
	法學緒論	Introduction to the Study of Law	2	2	2								
	社會與文化	Sociology and Culture	2	2	2								
	歷史與文化向度 (History and Culture)												
	中西藝術史導論	History of Art	2	2		2							2 credits required
	歷史小說與史學名著選讀	Select Readings of History Novels and Literatures	2	2		2							
	科技與智慧生活向度 (Technology and Wisdom)												
	Python與資料科學入門	Introduction to Python and Data Science	2	2		2							2 credits required
	現代生活科技	Modern Science and Technology	2	2		2							
	小計	**Total Credits**	**8**	**8**	**4**	**4**							
College Courses (Required) 院級課程 (必修)	計算機概論	Introduction to Computer Science	2	2	2								6 credits required
	職場跨領域學習與應用	Interdisciplinary Curriculum Applied in the Occupy	2	2			2						
	專業英文(一)	Professional English(1)	1	1					1				
	專業英文(二)	Professional English(2)	1	1							1		
	小計	**Total Credits**	**6**	**6**	**2**		**2**		**1**		**1**		
Professional Basic Courses (Required) 專業基礎 (必修)	微積分	Calculus	2	2	2								27 credits required
	計算機概論實習	Pratice of Introduction to Computer Science	1	2	1								
	程式設計	Programming	2	2	2								
	程式設計實習	Pratice of Programming	1	2	1								
	管理學	Management Fundamentals	3	3	3								
	管理數學	Management of Mathmatics	2	2		2							
	物件導向技術	Object-Oriented Technology	2	2		2							
	物件導向技術實習	Object-Oriented Technical Internship	1	2		1							
	資料結構	Data Structure	2	2			2						
	資料結構實習	Data Structures and Lab.	1	2			1						
	機率	Probability	2	2			2						
	統計學	Statistics	2	2				2					
	資料庫管理系統	Database Management System	2	2				2					
	資料庫管理系統實習	Database Management System Internship	1	2				1					
	作業系統	Operating System	3	3					3				
	小計	**Total Credits**	**27**	**32**	**9**	**5**	**5**	**5**	**3**				
Professional Core Courses (Required) 專業核心 (必修)	多媒體設計與製作	Multimedia Production	3	3	3								21 credits required
	管理資訊系統	Management Information System	3	3			3						
	演算法	Algorithms	3	3				3					
	企業資料通訊	Business Data Communications	3	3					3				
	雲端應用	Cloud Application	3	3						3			
	專案企劃	Project planning	1	2					1				
	專題製作(一)	Practical Project 1	1	2						1			
	專題製作(二)	Practical Project 2	1	2							1		
	業界實習	Internship in Professional Practice	3	9							3		
	小計	**Total Credits**	**21**	**30**	**3**		**3**	**3**	**4**	**4**	**4**		
Professional Elective Courses 專業選修 — **就業課程模組I AI大數據 Employment Course Module I AI Big Data**	物聯網	Internet of Things	3	3		3							15 credits required
	資料探勘	Data Mining	3	3			3						
	大數據分析	Big Data Analytics	3	3				3					
	人工智慧	Artificial Intelligence	3	3				3					
	AI深度學習	AI Deep Learning	3	3					3				
	資訊視覺化	Information Visualization	3	3						3			
	AIoT實務與應用	AIoT Practice and Application	3	3							3		
就業課程模組II 數位多媒體 Employment Course Module II Digital Multimedia	數位影像處理	Digital Image Processing	3	3		3							15 credits required
	Unity開發實務	Unity Development Practice	3	3			3						
	Unity跨平台應用設計	Unity Multi-Platform Application Development	3	3				3					
	影片剪輯	Video Clips	3	3					3				
	3D電腦動畫	3D Computer Animation	3	3					3				
	電腦動畫	Computer Animation	3	3						3			
	網路直播與行銷	Live Streaming and Marketing	3	3							3		
一般專選 General Elective Courses	資訊科技與管理概論	An Introduction for Information Technology and Management	2	2		2							16 credits required
	資訊安全管理	Information Security Management	3	3			3						
	資訊服務與學習	E-Service and Learning	2	2				2					
	行動裝置應用程式設計	Mobile Applications Design	3	3						3			
	智慧醫療與照護	Smart Health and Care	3	3							3		
	網頁規劃與設計	Web Planning and Design	3	3								3	
	管理書報討論	Management Seminar	3	3								3	
	醫療資訊管理	Medical Information Management	3	3								3	
	混合實境	Mixed Reality	3	3								3	
	專業選修最低學分數	**Minimum Credits**	**46**	**46**		**6**	**6**	**6**	**6**	**6**	**6**	**10**	
General Elective Courses 通識選修	通識選修最低學分數	**Minimum Credits for Elective Courses - General Education**	**8**	**8**	**2**	**2**	**2**	**2**					
Total Credits 學分總計	必修學分數	**Total Credits for Required Courses**	**74**	**104**	**23**	**14**	**11**	**9**	**8**	**4**	**5**		
	選修最低學分數	**Minimum Total Credits for Elective Courses**	**54**	**54**	**2**	**8**	**8**	**8**	**6**	**6**	**6**	**10**	
	畢業最低學分數(時數)	**Credit Requirments for Graduation**		All students are required to complete a minimum of 128 credits									

Remarks： 備註：	1. According to the "Measures for the Implementation of Compulsory English Courses in the Bachelor's Degree Program of Tzu Chi Science and Technology", English placement test shall be conducted in three classes:" English Basic Level ", "English Ordinary Level" and "English Advanced Level". 2. Students of the Bachelor's Degree Program should take at least 8 credits in general elective courses. They can choose freely in the four major courses, but they can choose no more than two courses in each major. 3. The graduation threshold for students of this Department is as follows: During the school period, students need to obtain any 2 pieces of domestic second-class skills certificates or international certificates, which are listed in the reward method for this school's students to obtain the department's professional certificates. 4. Electives are courses offered in the current semester. 一、依「慈濟科技大學四技部英語必修課程實施辦法」辦理英文分級安置測驗，分為「英文基礎級」、「英文普通級」、「英文進修級」三級分班教學。 二、四技部學生通識選修至少修滿８學分，得在四大向度自由選修，但每向度至多選修兩門 三、本系學生畢業門檻如下：學生於在校期間需取得本校學生考取專業證照獎勵辦法中，本系明訂之任何2張國內乙級技能檢定或國際證照。 四、專業選修課程依當學期實際開設課程為主。