

Department of Digital Technology Design Course Structure and Course List

Academic Year 2008

Course Code	Chinese Course Name	English Course Name	R/E	Credits	Hours	Years	Remarks
Specialization (58 credit hours for required courses, 32 credit hours for elective courses, and 10 credit hours for optional courses with a total of 100 credit hours.)							
340700	微積分(一)	Calculus (I)	R	2	3	1F	
573100	程式設計(一)	Computer Programming (I)	R	2	3	1F	
457300	離散數學	Discrete Mathematics	R	3	3	1F	
536500	數位邏輯設計	Digital Logic Design	R	3	3	1F	
536601	數位邏輯設計實驗	Digital Logic Design Lab	R	2	4	1A	
340800	微積分(二)	Calculus(II)	R	2	3	1S	
573200	程式設計(二)	Computer Programming (II)	R	2	3	1S	
500500	信號與系統 (含傅氏級數與拉式轉換)	Signals and Systems	R	3	3	1S	
349800	資料結構	Data Structure	R	3	3	1S	
367400	電子電路	Electric Circuits	R	3	3	2F	
536800	電子電路實驗	Electric Circuits Lab	R	2	3	2F	
505800	智慧財產權	Inventions and Patents	R	3	3	2F	
540000	數位學習導論	Introduction to Digital Learning	R	3	3	2F	
117600	作業系統	Operating System	R	3	3	2F	
340500	微處理機	Microprocessor	R	3	3	2S	
506700	微處理機實驗	Microprocessor Lab	R	2	3	2S	
500100	資料庫	Data Base Systems	R	3	3	2S	
508600	電腦網路	Computer Networks	R	3	3	2S	
522900	電腦圖學	Computer Graphics	R	3	3	2S	
589700	畢業專題(一)	Graduation Projects (I)	R	2	3	3F	
523400	嵌入式系統設計	Embedded System Design	R	2	3	3S	
589800	畢業專題(二)	Graduation Projects (II)	R	2	3	3S	
533700	畢業專題(三)	Graduation Projects (III)	R	2	3	4F	

Information Technology (16 credits required)							
414400	線性代數	Linear Algebra	E	3	3	2F	
610300	物件導向程式設計	Object-Oriented Programming	E	3	3	2S	
309100	軟體工程	Software Engineering	E	3	3	3F	
380400	演算法	Algorithms	E	3	3	3F	
329700	虛擬實境	Virtual Reality	E	3	3	3S	
593000	Windows 程式設計	Windows Programming	E	3	3	2F	
593100	JAVA 程式設計	JAVA Programming	E	3	3	2S	
533800	晶片設計	Chips Design	E	3	3	3S	
2600	人工智慧	Artificial Intelligence	E	3	3	4F	
534500	資料勘查	Data Mining	E	3	3	4S	
Internet Technology (16 credits required)							
441000	機率與統計	Probabilistic and Statistics	E	3	3	2F	
385800	網頁設計	Homepage Design	E	3	3	2S	
542000	電子商務	E-Commerce and Internet Marketing	E	3	3	4F	
543900	資訊安全	Information Security	E	3	3	3S	
592400	伺服器架設與管理	Server Deploy and Maintenance	E	3	3	3F	
592700	資料壓縮技術	Data Compression	E	3	3	3F	
539700	類神經網路	Artificial Neural Networks	E	3	3	4S	
541200	無線網路	Wireless Networks	E	3	3	3S	
615400	行動資訊系統	Mobile Information Systems	E	3	3	3S	
537100	網路程式設計	Web Programming	E	3	3	3F	
Multimedia Design and Creativity (16 credits required)							
545700	遊戲企劃	Game Planning	E	3	3	4S	
592300	3D 遊戲程式設計	Program Design of 3D Games	E	3	3	3F	
555000	機器人設計	Robot Design	E	3	3	3S	

371200	電腦動畫	Computer Animation	E	3	3	3S	
574500	多媒體設計	Multimedia Design	E	3	3	3F	
575800	創意開發	Thinking Creating	E	3	3	4F	
588600	數位音樂音訊處理	Digital Sound Effect Process	E	3	3	3S	
589500	媒體傳播	Media Communication	E	3	3	3F	
107500	色彩學	Color Theory	E	3	3	3F	
595900	多人線上遊戲程式設計	Massively Multiplayer Online Game Design	E	3	3	3S	
Learning Technology and Digital Content (16 credits required)							
598500	數位典藏	Digital Archive	E	3	3	3F	
600800	電腦輔助測驗與評量	Computer-Aided Examination and Assessment	E	3	3	3S	
603600	知識管理	Information Management	E	3	3	2F	
612400	數位學習媒體設計	Digital Learning Media Design	E	3	3	3F	
612000	學習科技輔具設計	Development of Rehabilitation Technology for Studying	E	3	3	3S	
575400	硬體描述語言	Hardware Description Language	E	3	3	2S	
612100	專家系統	Expert System	E	3	3	4F	
612200	電子書	Electronic Book	E	3	3	3F	
504400	人機介面	Human-Computer Interface	E	3	3	3S	
612300	數位創意產業之經營與行銷	The Management and Marketing of Digital Creative Industry	E	3	3	4S	

* The “R” and “E” in the “R/E” column refer to “Required” and “Elective” respectively.

* The “F” and “S” in the “Year” column refer to “Fall semester” and “Spring semester” respectively.