南台科技大學 103 學年度第 2 學期課程資訊	
課程名稱	計算機組織
課程編碼	G0D02702
系所代碼	0G
開課班級	四技資工二乙
開課教師	林榮三
學分	3.0
時數	3
上課節次地點	三 2 3 4 教室 J206
必選修	必修
課程概述	上課時討論上課指定用書
課程目標	1. 使學生了解計算機架構、組織、及其設計（技能） 2. 能熟悉計算機設計之原理及應用（知識） 3. 能具備電腦從業人員之專業態度（態度）
課程大綱	一、課程簡介 1.課程目的、進度、評分方式 二、Digital Logic Circuits 1. Logic Gates 2. Map Simplification 3. Combinational Circuits 4. Flip-Flops 5. Sequential Circuits 三、Digital Components 1. Multiplexers 2. Registers 3. Shift Registers 4. Binary Counters 5. Memory Unit 四、Register Transfer and Microoperations 1. Register Transfer 2. Bus and Memory Transfers 3. Logic Microoperations 4. Shift Microoperations 5. Arithmetic Logic Shift Unit 五、Basic Computer Organization and Design 1. Computer Instructions 2. Timing and Control

	3. Instruction Cycle
	4. Input-Output and Interrupt
	5. Complete Computer Description
	6. Design of Basic Computer
	7. Design of Accumulator Logic
	六、Programming the Basic Computer
	1. Assembly Language
	2. The Assembler
	3. Program Loops
	4. Programming Arithmetic and Logic Operations
	5. Subroutines
	6. Input-Output Programming
	七、Microprogrammed Control
	1. Control Memory
	2. Address Sequencing
	3. Microprogram Example
	4. Design of Control Unit
英文大綱	一、課程簡介
	1.課程目的、進度、評分方式
	二、Digital Logic Circuits
	1. Logic Gates
	2. Map Simplification
	3. Combinational Circuits
	4. Flip-Flops
	5. Sequential Circuits
	三、Digital Components
	1. Multiplexers
	2. Registers
	3. Shift Registers
	4. Binary Counters
	5. Memory Unit
	四、Register Transfer and Microoperations
	1. Register Transfer
	2. Bus and Memory Transfers
	3. Logic Microoperations
	4. Shift Microoperations
	5. Arithmetic Logic Shift Unit
	五、Basic Computer Organization and Design
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教學方式	
評量方法	
指定用書	COMPUTER SYSTEM ARCHITECTURE THIRD EDITION (中譯本)
參考書籍	Logic and Computer Design Fundamentals Prentice Hall
先修科目	數位邏輯設計、數位系統設計
教學資源	
注意事項	
全程外語授課	0
授課語言 1	華語
授課語言 2	
輔導考照 1	
輔導考照 2	