

南台科技大學 102 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	四技資工二甲
開課教師	林榮三
學分	3.0
時數	3
上課節次地點	一 6 7 8 教室 I303
必選修	必修
課程概述	上課時討論上課指定用書
課程目標	<ol style="list-style-type: none"> 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	<p>一、課程簡介</p> <ol style="list-style-type: none"> 1. 課程目的、進度、評分方式 <p>二、Digital Logic Circuits</p> <ol style="list-style-type: none"> 1. Logic Gates 2. Map Simplification 3. Combinational Circuits 4. Flip-Flops 5. Sequential Circuits <p>三、Digital Components</p> <ol style="list-style-type: none"> 1. Multiplexers 2. Registers 3. Shift Registers 4. Binary Counters 5. Memory Unit <p>四、Register Transfer and Microoperations</p> <ol style="list-style-type: none"> 1. Register Transfer 2. Bus and Memory Transfers 3. Logic Microoperations 4. Shift Microoperations 5. Arithmetic Logic Shift Unit <p>五、Basic Computer Organization and Design</p> <ol style="list-style-type: none"> 1. Computer Instructions 2. Timing and Control

	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 1. Assembly Language 2. The Assembler 3. Program Loops 4. Programming Arithmetic and Logic Operations 5. Subroutines 6. Input-Output Programming 七、Microprogrammed Control <ul style="list-style-type: none"> 1. Control Memory 2. Address Sequencing 3. Microprogram Example 4. Design of Control Unit
英文大綱	<ul style="list-style-type: none"> 一、課程簡介 <ul style="list-style-type: none"> 1.課程目的、進度、評分方式 二、Digital Logic Circuits <ul style="list-style-type: none"> 1. Logic Gates 2. Map Simplification 3. Combinational Circuits 4. Flip-Flops 5. Sequential Circuits 三、Digital Components <ul style="list-style-type: none"> 1. Multiplexers 2. Registers 3. Shift Registers 4. Binary Counters 5. Memory Unit 四、Register Transfer and Microoperations <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 1. Computer Instructions 2. Timing and Control

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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	