南台科技大學 98 學年度第 2 期課程資訊

課程名稱	電子學(一)
課程編碼	30D10302
系所代碼	03
開課班級	四技晶片二甲
開課教師	陳再得
學分	3.0
時數	3
上課節次地點	五 2 3 4 教室 I104
必選修	必修
課程概述	●Semiconductor Materials and Diodes ●Diode Circuits ●The Bipolar Junction Transistor ●Basic Bjt Amplifiers
課程目標	The purpose of the course is to provide a foundation for analyzing and designing both analog and digital electronic circuits. The majority of electronic circuits today are designed as integrated circuits (ICs), in witch the entire circuit is fabricated on a single piece of semiconductor material. The ultimate objective is to understand the operation, characteristics, and limitations of thee integrated circuit.
課程大綱	●半導體材料和二極體.. ●二極體電路. ●雙極接面電晶體. ●基本雙極電晶放大器.
英文大綱	●Semiconductor Materials and Diodes 1.Semiconductor Materials and Properties 2.The pn Junction 3.Diode Circuits:DC Analysis and Models 4.Diode Circuits:AC Equivalent Circuit 5.Other Diode Type ●Diode Circuits 1.Rectifier Circuits 2.Zener Diode Circuits 3.Clipper and Clamper Circuits 4.Multiple-Diode Circuits 5.Photodiode and LEd Circuits

	●The Bipolar Junction Transistor 1.Basic Bipolar Junction Transistor 2.DC Analysis of Transistor Circuits 3.Basic Transistor Circuits 4.Bipolar Transistor Biasing 5.Multistage Circuits ●Basic Bjt Amplifiers 1.Analog Signals and Linear Amplifiers 2.The Bipolar Linear Amplifier 3.Basic Transistor Amplifier Configurations 4.Common-Emitter Amplifers 5.AC Load Line Analysis 6.Common-Coiiector (Emitter-Follower) Amplifiers 7.Common-Base Amplifiers 8.The Three Basic Amplifiers:Summary and Comparison 9.Multistage Amplifiers 10.Power Considerations
教學方式	課堂教授,
評量方法	自行設計測驗,作業／習題練習,課程參與度(出席率),
指定用書	微電子學　(第三版) 上冊
參考書籍	
先修科目	
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**	