

南台科技大學 98 學年度第 2 期課程資訊

課程名稱	高等精密控制系統實務
課程編碼	10M07801
系所代碼	01
開課班級	碩研機械一甲 碩研機電一甲
開課教師	黃東雍
學分	3.0
時數	3
上課節次地點	三 1 2 3 教室 J004
必選修	選修
課程概述	To provide students with knowledge of practical precision control systems.
課程目標	Students may apply the knowledge to the precision industry.
課程大綱	1. 前言 2. 定位系統 3. 量測學 4. 數位訊號處理 5. 實際控制法則與相關事項 6. 應用
英文大綱	1. Introduction 2. Positioning Systems 3. Metrology 4. DSP 5. Practical Control Methodology and Related Issues 6. Applications
教學方式	課堂教授,
評量方法	自行設計測驗,作業／習題練習,課堂討論,
指定用書	Lecture notes excerpted from references
參考書籍	1. James H. Harter, Electromechanics :principles, concepts, and devices, Prentice Hall,1995. 2. Gupta, Elements of Control Systems, Prentice Hall, 2002. 3. Franklin, Powell, and Emami-Naeini, Feedback Control of Dynamic Systems, 4th Ed., Prentice Hall, 2002. 4. Kenjo, Electric Motors and their Controls: An Introduction, Oxford University Press, 1991. 5. Kiencke and Nielsen, Automotive Control Systems—For Engine, Drivelines, and Vehicle, Springer, 2000. 6. Stephen D. Senturia, Microsystem Design, Kluwer, 2001. 7. Datta, Ho and Bhattacharyya, Structure and Synthesis of PID Controllers,

	Springer, 2000. 8. Engineering References, Parker Hannifin's Catalogue. 9. Fanuc, Hiwin, Mitsubishi, Moog & miscellaneous Catalogues. 10. IEEE & ASME Journals 11. Fatikow and Rembold, Microsystem Technology and Microrobotics, Springer, 1997. 12. Menz, Mohr, and Paul, Microsystem Technology, Wiley, 2001.
先修科目	None.
教學資源	projector
注意事項	Basically there is no lab, no hands-on practice.
全程外語授課	1
授課語言 1	英語
授課語言 2	
輔導考照 1	無
輔導考照 2	無