

南台科技大學 98 學年度第 2 期課程資訊

課程名稱	數位控制系統
課程編碼	2BM00901
系所代碼	02
開課班級	碩電機國際一甲
開課教師	王啟州
學分	3.0
時數	3
上課節次地點	四 2 3 4 教室 B304
必選修	選修
課程概述	
課程目標	This course elaborates the theoretical aspects essential to hands-on digital control implementation. Main themes including sampling and reconstruction, discrete state equation, discrete-time systems stability and digital controller design will be covered in depth. Grade will be based on students' performance in two in-class exams and one final project.
課程大綱	
英文大綱	<ol style="list-style-type: none"> 1. Digital Control Systems: Overview 2. z-Transform 3. Solution of Difference Equations 4. Inverse z-Transform 5. Simulation Diagrams 6. State Variable Models 7. Sampled-Data Control Systems 8. The Ideal Sampler 9. Results from the Fourier Transform 10. Digital-to-Analog Conversion 11. Analog-to-Digital Conversion 12. Time Delays 13. Non-synchronous Sampling 14. Closed-loop Systems 15. Mapping the s-plane into the z-plane 16. Bilinear Transformation 17. Jury's Stability Test
教學方式	
評量方法	
指定用書	

參考書籍	
先修科目	
教學資源	
注意事項	
全程外語授課	1
授課語言 1	英語
授課語言 2	
輔導考照 1	
輔導考照 2	