

# 101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	數位控制系統與實驗	Serial No. / ID	2845 / MUR5026
Dept.	機械與自動化工程學系碩士班	School System / Class	研究所碩士班1年1班
Lecturer	蔡耀文	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(五)234 / H466	Language	English

Introduction
<ol style="list-style-type: none"><li>1. Concept of Digital Control System</li><li>2. Mathematics of Digital Control System</li><li>3. Analysis methods of Digital Control System</li><li>4. The controllers design of Digital Control System</li><li>5. Experiment of Digital Control System</li></ol>

Outline
<ol style="list-style-type: none"><li>1.Experiment: Introduction to LabVIEW</li><li>2.Experiment: A/D converter</li><li>3.Experiment: D/A converter</li><li>4.Experiment: Sensor(Encoder)</li><li>5.Experiment: Motor control</li><li>6.Experiment: Final test</li><li>7.Discrete-Time Systems and the z-Transform</li><li>8. Discrete-time System Analysis</li><li>9. System Time-Response Characteristics</li><li>10. Stability Analysis</li><li>11. Digital Controller Design</li><li>12. State-Space Method</li></ol>

Prerequisite
Automatic control