## 102-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	永磁式無刷電機設計實務	Serial No. / ID	2550 / MPR5008
Dept.	工具機產業碩士學位學程	School System / Class	研究所碩士班1年1班
Lecturer	陳盛基	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(五)234 / H227	Language	Chinese

## Introduction

In recent years, PM brushless machines have been extensively used in industrial, medical and aerospace applications, including medical assist systems, electromechanical flight actuators, electric vehicles, computers and household electric appliances, among others. Therefore, this course will focus on PM brushless machines design and analysis.

## Outline

Chap1. Basic Concept

Chap2. Manetic Circuit Model

Chap3. Relationship between Electric

and Mechanical Formulas

Chap4. Brushless Motor Basics

Chap5. Motor Design

Chap6. Winding Layout

Chap7. Magnetic Circuits Design

Chap8. Machine Control

Chap9. Performances of Brushless Motor

Chap10.Motor Design Examples

## Prerequisite

Electric Circuit, Calculus