## 100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	機械工程實驗(二)	Serial No. / ID	1139 / MAV3090
Dept.	機械與自動化工程學系	School System / Class	四技部3年1班
Lecturer	蔡耀文	Full or Part-time	專任
Required / Credit	Required / 1	Graduate Class	No
Time / Place	(二)789 / H455	Language	Chinese

## Introduction

Mechanical Engineering Lab (II) is a fundamental course to develop the analytic and experimental capabilities of students. This course will provide an understanding to apply the basic theories of fluid mechanics, solid mechanics, and automatic control to mechanical systems. The adequate ability of experimental techniques in measuring various physical quantities will be also trained.

## **Outline**

- 1. Free and force turbulent flow experiment
- 2. Reynold experiment
- 3. Pipeline fitting head-loss experiment
- 4. Viscosity coefficient experiment
- 5. Air jet experiment
- 6. Buckling of column experiment
- 7. Torsion of shaft experiment
- 8. Shear center of beam experiment
- 9. Bending of beam experiment
- 10. Presure vessel of thin wall experiment
- 11. A/D transform experiment
- 12. D/A transform experiment
- 13. DI experiment
- 14. DI/DO experiment

## Prerequisite

Fluid Mechanics, Engineering Mechanics, Mechanics of Materials, Automatic Control