102-2 Preliminary Syllabus, Da-Yeh Univ

| Information | | | | |
|-------------------|--------------------------|-----------------------|----------------|--|
| Title | 機電整合 | Serial No. / ID | 2038 / MAB3009 | |
| Dept. | 機械與自動化工程學系 | School System / Class | 進修學士班3年1班 | |
| Lecturer | 陳國祥 | Full or Part-time | 專任 | |
| Required / Credit | Required / 3 | Graduate Class | No | |
| Time / Place | (一)AB / H440 (四)B / H440 | Language | Chinese | |

Introduction

Study the theory and concepts of mechatronics.

Various considerations of practical applications including tools, instrumentation,

design issues, automatic control, and industrial techniques.

Outline

Control system

Basic components, sensors, wiring, motors, motor control circuits, and mechanical parts.

Control strategies and controller types

Programmable Logic Controllers.

Linear and rotational motion, springs, friction, gears, levers, heat transfer

Digital controllers

Inductive proximity sensors, ultrasonic flow sensors, and cascade control

AC variable frequency motor drives

PID control

AS-I sensor factory network.

| Prerequisite | |
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| Physics | |