## 102-2 Preliminary Syllabus, Da-Yeh Univ

| Information       |                          |                       |                |  |
|-------------------|--------------------------|-----------------------|----------------|--|
| Title             | 車輛電子學                    | Serial No. / ID       | 0830 / MAI2050 |  |
| Dept.             | 機械與自動化工程學系               | School System / Class | 大學日間部2年1班      |  |
| Lecturer          | 張一屏                      | Full or Part-time     | 專任             |  |
| Required / Credit | Optinal / 3              | Graduate Class        | No             |  |
| Time / Place      | (二)56 / H440 (五)5 / H440 | Language              | Chinese        |  |

## Introduction

Let the student familiar fundamental principles and system elements for vehicle electonic control system so that the design purpose and the matching between systems can be achieved. By introducing the content of the course, the electronic elements can be integrated with electric circuits and automatic control to realize the restriction and design consideration for vehicle electronic constrol system.

## Outline

Introduction, Vehicle Control System and Instrumental System, Review for electronic and electrical circuit, Microcontroller, Vehicle microcontroller system control, Engine Management system, Sensors and Actuators, Digital ignition system, Electronic fuel injection system, Idle speed control and exhaust gas ricirculation system, Vehicle Motion control system, CAN bus and intelligent vehicle control system, Vehicle diagonis system.

| Prerequisite       |  |
|--------------------|--|
| Physics            |  |
| Electronics        |  |
| Automatic Control  |  |
| Electric Machinery |  |