

# 102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	引擎管理系統	Serial No. / ID	2185 / MAV3043
Dept.	機械與自動化工程學系	School System / Class	四技部3年1班
Lecturer	邱信璋	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)BCD / H439	Language	Chinese

Introduction
Engine operation principles and electronic fuel injection system are introduced so that the student can understand how to apply physic and mathematic laws and electronic control system to real engine management system. The currently engine management system construction and operation softwares are taught to connect the engine control theory and reality. Different EMS are compared to visualize the variation between companies.

Outline
<ol style="list-style-type: none"><li>1.Operation principles for IC engines<ol style="list-style-type: none"><li>1.1Fundamentals of engines</li><li>1.2Performance analysis of engine</li></ol></li><li>2.Gasoline engine fuel injection system<ol style="list-style-type: none"><li>2.1History of fuel injection</li><li>2.2Fuel injection controlled engine</li><li>2.3Comparison between carburetor and fuel injection</li></ol></li><li>3.Engine sensors introduction</li><li>4.Engine management system introduction</li><li>5.EMS different control types from different companies</li><li>6.Diagonisis system for engine troubleshooting</li></ol>

Prerequisite
Internal Combustion engines Automatic control Vehicle electronic control system