

101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	先進動力系統	Serial No. / ID	1976 / MAI3078
Dept.	機械與自動化工程學系	School System / Class	大學日間部3年1班
Lecturer	張一屏	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(四)5 / H440 (五)78 / H440	Language	Chinese

Introduction
Introduction of advanced vehicle powertrain system including the internal combustion engines and electric, hybrid power plants. The corresponding matching for vehicle road load requirement and their control system will also be instructed.

Outline
<ol style="list-style-type: none"> 1. Introduction and classification 2. Thermodynamic power cycle analysis 3. Vehicle powerplant requirement 4. Gasoline engine control system 5. Diesel engine combustion 6. Electric motor for vehicle powerplant 7. AC-DC converter 8. Hybrid Electric Vehicle 9. Fuel Cell 10. Energy Conversion Efficient 11. Advanced vehicle powerplant 12. Powerplant control and evaluation <p>Classification of Powerplants</p>

Prerequisite
<p>Thermodynamics</p> <p>Automatic control</p> <p>Internal combustion engines</p> <p>Vehicle electronic control system</p>