

# 100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	智慧型材料概論	Serial No. / ID	1836 / MAI3051
Dept.	機械與自動化工程學系	School System / Class	大學日間部3年1班
Lecturer	羅正忠	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)12 / H439 (二)1 / H439	Language	Chinese

Introduction
The principal objective of this course is to present the principles of intelligent materials by focusing on the variety area of engineering applications, such as aeronautic, mechanical, civil engineering.

Outline
Increased demands for high performance control design in combination with recent advances in material science have produced a class of systems termed smart, intelligent or adaptive structures. While subtle differences may be associated with the individual terms, these structures are generally defined as systems whose dynamics can be monitored or modified by distributed sensors and actuators, in accordance with an integrated control law, to accommodate time-varying exogenous inputs or changing environmental conditions.

Prerequisite
Basic knowledge of material and engineering science