98-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	微機電系統概論	Serial No. / ID	3027 / MAV3040
Dept.	機械與自動化工程學系	School System / Class	四技部3年2班
Lecturer	王東安	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	NO
Time / Place	(五)ABC / B505	Language	Chinese

Introduction

Microelectromechanical Systems is a fundamental course connecting microfabrication and microsystem design with practical problems. This course will provide students a thorough understanding of the bulk micromachining, surface micromachining, lithography, electroforming, molding, micro electro-discharge machining. The adequate ability to develop the micro manufacture and design model and to analyze the microsystem engineering will be developed.

Outline

- 1.Introduction to microscopic world 2.MEMS application
- 3.Bulk niicromachining
- 4. Surface micromachining
- 5.LIGA
- 6.Non IC-based micromachining
- 7.Bonding techniques
- 8. Detection techniques
- 9. Microactuators and microsensors

Prerequisite

Mechanical Manufacturing, Mechanics of Materials