98-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	電腦輔助精密製造技術	Serial No. / ID	1180 / MAI4050
Dept.	機械與自動化工程學系	School System / Class	大學日間部4年5班
Lecturer	賴元隆	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	Yes
Time / Place	(三)2 / H466 (三)34 / H727	Language	Chinese

Introduction

Traditional curriculum, teaching materials and the presentation is static, the majority of the students on the geometric concept may be a nightmare, very few students are able to enjoy the same as the expert understanding of the pleasure of discovery; but the geometry is the concept of learning in computer-aided manufacturing The most important part. How to use computer software effectively into our teaching, so that the static interaction between the dynamic geometry into the course will be an important way.

Computer Aided Manufacturing Applications course will learn how to generate the geometric elements (point, line, surface, solid), the tool path (hole through the side of the bag type, engraving, surface processing), processing parameters and post-processor program to write code to generate NC While practicing familiar practice processing applications.

- 1. the ability for students to learn must be used to develop or planning part of the process.
- 2. to enable students to learn to use computer-aided manufacturing software to generate CNC part of complex graphics code.
- 3. to enable students to integrate computer-aided design and computer aided manufacturing software to develop CNC part code.

Course section and actually import the concept of reverse engineering, reverse engineering, machine control applications in manufacturing, rapid prototyping also describes the knowledge and the definition and application of virtual engineering.

Outline

Understand the basic structure and operation (first half), they are free to work independently (after half). Computer graphics software tools, supplemented by analysis software. One course with the software, CAD / CAM system will choose from the wide range of applications, practical good, can be used to simulate a simple drawing or processing priority. Although software packages (not developed by the students themselves), but the focus with the know-how to master quite a few; not the same with the general curriculum, emphasizing the practice makes perfect, not happen overnight. So usually in the classroom to encourage students to start their own more to explore, to understand the structure, there do not know where the group discussions in class. Topics important unit

- 1. CNC Introduction.
- 2. CNC machining program.
- 3. computer aided manufacturing software works.
- 4. computer aided manufacturing applications.
- 5. reverse engineering applications.

6. rapid prototyping applications.

Prerequisite

Mechanical manufacturing