# DE ANZA COLLEGE – ADVANCED TECHNOLOGY CENTER

# Business and Computer Systems Division CAD and Digital Imaging Course Outline

Degree Applicable

CAD and Digital Imaging 73

Effective Quarter Fall 2005

## I. Catalog Description

CDI 73 A - L	Pro/ENGINEER Wildfire 2.	0 (Pro/SHEETMETAL)	4 Units
CDI 73A Pro/ENGINEER Wildfin	re 2.0 (Pro/SHEETMETAL)		
CDI 73B CDI 73C		CDI 73H CDI 73I	
CDI 73D		CDI 731	
ODI 70D		ODI 700	

CDI 73E CDI 73K CDI 73F CDI 73L

Prerequisites: CDI 70

Eight hours lecture-laboratory

Principles of sheet metal design using Pro/ENGINEER Pro/SHEETMETAL.

#### II. Course Objectives

The student will:

- A. Create Sheet Metal Wall features and establish a design approach.
- B. Apply Punch, Notch and special features.
- C. Setup drawing options and create sheet metal drawings.
- D. Establish additional features including Form, Flatten, and Flat Pattern.
- E. Create part conversion features.

#### III. Essential Student Materials

None

#### IV. Essential College Facilities

None

#### V. Expanded Description: Content and Form

- A. Wall Creation
  - 1. Sheet Metal Parts
  - 2. Design Approach
  - 3. Viewing the Sheet Metal Part
  - 4. Walls
- B. Cut, Notch, And Punch Features
  - 1. Cut Feature
  - 2. Dimensioning Scheme
  - 3. Punch and Notch Features
- C. Sheet Metal Setup and Drawings
  - 1. Default Radius
  - 2. Flat State
  - 3. Bend Tables
  - 4. Sheet Metal Drawings
- D. Additional Features
  - 1. Flat Pattern
  - 2. Solid Features
  - 3. Projected Datum Curves
- E. Part Conversion
  - 1. Converting Geometry
  - 2. Rib Features
  - 3. Converting Solid Parts to Sheet Metal Parts

## VII. Assignment

- A. Lab projects.
- B. Worksheets.
- C. Reading from textbooks and references.

#### VIII. Methods of Evaluating Objectives

- A. Completion of lab projects.
- B. Comprehensive design projects.
- C. Comprehensive final exam

#### IX. Texts and References

- A. Text:
  - 1. Lamit, Louis Gary. Pro/ENGINEER Wildfire, ITP