

# **COURSE OUTLINE**

**CADD-106**  
**CAD Systems**  
**3 Credits**

## **HOWARD COMMUNITY COLLEGE**

### **Description**

Prior to taking this course, the student would have acquired an in-depth knowledge and be well-versed in at least one CAD system used in industry. This course is intended to broaden the student's knowledge in other popular CAD packages by studying similarities and differences of the various commands and techniques. The student will experience the problems of translating between various CAD systems. The objective of this course is to prepare the student to adapt in an industrial environment quickly and easily to any of the most widely used CAD systems. Prerequisite: CADD-105. (2 hours lecture, 2 hours lab)

### **Overall Course Objectives**

Upon completion of this course, the student will be able to:

1. Utilize the skills and techniques of the prior courses to analyze and compare other graphic packages.
2. Identify and solve translation problems between graphic packages.
3. Create working drawings with other graphic packages.
4. Create IGES files for translation.
5. Create DXF files for translation.
6. Create GIF files for translation to non-technical software.
7. Create PCX files for translations.
8. Develop raster-to-vector translation solutions.
9. Learn the application of scanned images.
10. Learn the merging of raster and vector data.

### **Major Topics**

- I. CAD File Structure and Types
  - A. The Structure of a Drawing File
  - B. The Structure of a CAD Program
  - C. The Output Formats of a CAD Program
  - D. The Translation Formats of CAD Programs
  
- II. Getting Information In and Out of a CAD System
  - A. Traditional Output File Formats
  - B. Graphic File Translators and CAD
  - C. Internal and External Translators

### III. Using CAD With Other Programs

- A. Using CAD and Word Processors
- B. Using CAD with Spreadsheets
- C. Using CAD with Databases

### **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member with emphasis on the following:

Final grades will be based lab exercises, homework, quizzes and unit tests.

Writing: CAD-specific writing assignments will be assigned to students by a faculty member.

### **Other Course Information**

This course is a course in the Computer-Aided Design program.