COURSE INFORMATION FORM

DISCIPLINE: Engineering Technology

COURSE TITLE: CADD I

CR.HR: 3  LECT HR: 2  LAB HR: 2  CLIN/INTERN HR: 0  CLOCK HR: 0

CATALOG DESCRIPTION

Basic computer aided drafting and design (CADD) using a current industry standard CADD software package. Includes file management, basic drawing and editing commands, blocks and wblocks, dimensioning, polylines, hatching, plotting, intermediate drawing and editing commands and CADD standards (layers, text styles and dimension styles).

PREREQUISITES

None

EXPECTED STUDENT OUTCOMES IN THE COURSE

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

1. Manage multiple CADD files.
2. Identify CADD system variables.
3. Define CADD terminology.
4. Construct basic geometry using CADD software.
5. Edit basic geometry using CADD software.
6. Construct complex geometry using CADD software.
7. Edit complex geometry using CADD software.
8. Create orthographic drawings using CADD software.
9. Create section views and hatch patterns with CADD software.
10. Create auxiliary views using CADD software.
11. Apply dimensions and annotations using CADD software.
12. Produce standardized files using CADD software.
13. Produce saved symbols using CADD software.
14. Solve geometric problems using CADD.
15. Employ and established set of CADD standards.
16. Employ standard processes to draw and plot a CADD drawing to a standard scale.
CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

Daily projects and assignments (1, 4-14)
Written exams (2,3)
Drawing/performance exams (1, 4-14)
Portfolio (1-14)

PROGRAM-LEVEL OUTCOMES ADDRESSED

General Education Outcomes
Specify which general education outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes and assessment measures.

Occupational Program Outcomes
Specify which occupational program outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes to assessment measures.
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Introduction to Computer Aided Drafting and Design  
   A. Coordinate Systems  
   B. User Interface  
   C. Basic Drawing Aids  
   D. Basic Zooming and Panning Commands  
   E. Basic Drawing Commands  

II. Basic CADD Drawing Tools and Drawing Aids  
   A. Editing Objects  
   B. Creating Circles and Curves  
   C. Object Snaps  
   D. Direct Distance Entry and Tracking  

III. Intermediate CADD Tools  
   A. Three Step Commands  
   B. Query Commands  
   C. Complex Lines  
   D. CADD Standards  

IV. Views and Dimensioning with CADD  
   A. Orthographic Views  
   B. Section Views  
   C. Auxiliary Views  
   D. Dimensioning Tools  
   E. Dimension Styles  

V. CADD Symbols  
   A. Blocks  
   B. Wblocks  

VI. Drawing and Plotting to a Standard Scale  
   A. 17 Step Process  
   B. Employing CADD Standards  

VII. CADD Unit Types  

12/16/08
A. Mechanical Units
B. Architectural Units
C. Angular Units

VIII. Isometric Drawing and Projections
A. Definitions and Axes
B. Producing Isometrics with CADD