DATE SUBMITTED: 11/15/11
DATE DICC APPROVED: 3/27/2012
CATALOG NO.: ETEC 170
DATE LAST REVIEWED: 

COURSE INFORMATION FORM

DISCIPLINE: ETEC/CADD
COURSE TITLE: CADD I, Microstation
CR.HR: 3 LECT HR: 2 LAB HR: 2 CLIN/INTERN HR: 
CLOCK HR: 

CATALOG DESCRIPTION

An introduction to computer aided drafting/design (CADD) using Microstation. Topics will include creating basic and complex geometry, CADD standards, dimensioning, cells and cell libraries, plotting and reference files.

PREREQUISITES

ETEC 152

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

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

1. Define terms related to a Microstation.
2. Identify and manipulate Microstation system variables.
3. Manage multiple files.
4. Set unit types for different drawings.
5. Create precise lines using Accudraw.
6. Create basic and complex geometry.
7. Select elements using multiple selection methods.
8. Edit and redefine existing geometry.
9. Measure and dimension drawing elements.
10. Create a standard set of levels.
11. Create a standard set of dimensions.
12. Create a standard set of text styles.
13. Construct cells and cell libraries.
14. Configure and plot a drawing.
GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>ESO</th>
</tr>
</thead>
</table>

PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Daily projects/assignments (3-15)
2. Daily quizzes (1,2)
3. Written exams (1,2)
4. Drawing/performance exam (3-15)
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
   A. Startup and user interface
   B. View controls
   C. Precision input

II. Drawing and Set Up
   A. Element creation
   B. Snaps and locks
   C. Annotation

III. Element Manipulation
   A. Editing commands
   B. Selection
   C. Fence manipulation

IV. CADD Standards
   A. Levels, colors, line style, line weight
   B. Changing element attributes
   C. Text styles
   D. Dimension settings

V. Measurement and Dimensioning
   A. Measurement tools
   B. Dimension tools

VI. Advanced Drawing Tools
   A. Accudraw
   B. Hatching

VII. Cells and Cell Libraries
   A. Cell creation
   B. Cell insertion
   C. Cell libraries

VIII. Plotting
   A. Plot set up
   B. Plot scales
   C. Saving configurations
IX. Reference Files
   A. Overview of reference files
   B. Attaching a reference file
   C. Reference manipulation

*X. Introduction to Three Dimensions
   A. Three-dimensional environment
   B. Viewing options
   C. Constructing three-dimensional objects