COMMON COURSE OUTLINE: Course discipline/number/title: CAD 1235: CAD II

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 16 lecture hours, 32 lab hours
3. Prerequisites (Course discipline/number): CAD 1230, CAD 1234
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

A continuation of CAD 1234, this hands-on class strives to make the student more proficient using AutoCAD. Major topics of instruction will include: advanced drawing commands, using isoplane and elevation practices, blocks and attributes, sectional views, external references, multiview layouts, usage of autolisp macros, customization tools, and an introduction to three-dimensional drawings. All CAD courses will be taught in a state-of-the-art facility featuring the latest release of AutoCAD.

B. DATE LAST REVISED (Month, year): August, 2002

C. OUTLINE OF MAJOR CONTENT AREAS:
1. AutoCAD Applications
   a) Assigning attributes
   b) DXF and IGES format
2. Using efficiency tools
   a) grips
   b) advanced object selection
3. Drawing with complex objects
   a) polylines
   b) regions
   c) multilines
4. Understanding paper space and model space
5. Use external reference files
6. Object linking embedding
7. Using image files
8. Using layouts and advanced plotting features
9. Customizing AutoCad
   a) Advanced configuration
   b) Preference settings
   c) System variables
   d) Screen menus
   e) Auto LISP
10. Introduction to AutoCAD’s 3D features
    a) Display of 3-D models
    b) Working in 3-D space

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Use advanced drawing commands.
2. Use isoplanes to create a drawing.
3. Draw using viewport commands.
4. Create original drawings.
5. Utilize viewport commands
6. Customizing AutoCAD.
7. Using layouts and advanced plotting features.

E. LEARNING OUTCOMES (MNTC): NA
F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   1. Tests
   2. Quizzes
   3. Drawings

G. SPECIAL INFORMATION (if any):
   Tuition differential