

Course discipline/number/title: CAD 1150: CAD Data Communications

A. CATALOG DESCRIPTION

1. Credits: 3
2. Hours/Week: 1 lecture, 4 lab
3. Prerequisites (Course discipline/number): CAD 1039, CAD 1120, CAD 1220, CAD 1221
4. MnTC Goals (if any): NA

The course offers students the capability of integrating CAD data with MS Office products and graphics programs to create projects in a "hands on" environment. Students will create projects using the CAD prototype shop - learning to operate the laser, rapid prototype machine, CNC router and Acrylic bender. These skills will make CAD majors more productive in the workplace. This course will be taught in a state-of-the-art facility featuring the latest release of SolidWorks. Students must receive a grade of C or better in all prerequisite courses.

B. DATE LAST REVISED (Month, year): October, 2017

C. OUTLINE OF MAJOR CONTENT AREAS:

1. Integrating CAD data with MS Office products.
2. Use of CAD data in graphics tools
3. Universal Laser
4. Dimension Rapid Prototype Machine
5. ShopBot CNC
6. Photo enhancement and cropping software
7. Acrylic Bender
8. Scanning, tracing, and drawing graphics
9. Email, Internet and the world-wide-web

D. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Demonstrate Office products within a CAD work environment
2. Import /Export CAD data correctly
3. Use the Universal Laser creatively for projects
4. Use the Dimension Rapid Prototype Machine
5. Use the vinyl cutters to create projects
6. Use the ShopBot CNC
7. Scan, crop, and modify photos
8. Develop creative skills

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:

Methods may include but not limited to:

1. Evaluation of electronic files
2. Skill proficiency exercises
3. Quizzes
4. Exams

G. RCTC CORE OUTCOME(S) ADDRESSED:

Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.

H. SPECIAL INFORMATION (if any): None