

Minnesota State College Southeast

MDAD 1252: Working Drawings 1 for CAD Design

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites:

This course requires any of these three prerequisite categories

1. Both of these

MDAD 1204 - Autocad

MDAD 1250 - Print Reading for CAD Design

Or

2. Both of these

MDAD 1241 - Solidworks

MDAD 1250 - Print Reading for CAD Design

Or

3. Both of these

MDAD 1250 - Print Reading for CAD Design

MDAD 1255 - CAD Drawing Using Free Software

Corequisites: None

MnTC Goals: None

This course will provide the student with a solid understanding of what is required of industrial technical drawings. This course covers assemblies, sectioning, machine parts, tolerancing, sheet metal developments, fasteners, and weldments. Special note: The student is required to purchase a student version of Solidworks, Inventor, or equivalent 3d software. (Prerequisites: MDAD1204 and MDAD1250, or MDAD1241 and MDAD1250, or MDAD1255 and MDAD1250.) Concurrent enrollment in MDAD1241 Solidworks is required if Solidworks has not been completed.) (3 credits: 3 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 01/24/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Complete technical drawings that meet industry standards
2. Analyze and complete assembly drawings
3. Analyze piece part drawings
4. Create weldment drawings
5. Complete sheet metal design problems
6. Analyze dimensioning techniques
7. Apply standard tolerances
8. Apply standard parts
9. Apply thread systems to mechanical drawings
10. Apply standard fits
11. Apply proper finishes

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted