

Minnesota State College Southeast

MDAD 1202: Fundamentals of Drafting

A. COURSE DESCRIPTION

Credits: 5

Lecture Hours/Week: 1

Lab Hours/Week: 8

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course will enable the student to develop complete sets of engineering drawings. Sketching, orthographic views, sections, dimensioning, and tolerancing will be covered. Fastening systems will also be covered. This course is meant to help lay the building blocks for the remainder of the Drafting and Design course. It is meant to be taken in conjunction with or after AutoCAD. (Prerequisite: None)
(5 credits: 1 lecture/4 lab)

B. COURSE EFFECTIVE DATES: 04/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Analyze technical drawing
2. Analyze manual drafting equipment
3. Analyze manual drafting procedures
4. Analyze technical lettering
5. Analyze technical sketching
6. Analyze geometric techniques
7. Analyze graphic communication
8. Analyze multiview drawings
9. Analyze auxiliary views
10. Analyze sectional views
11. Analyze descriptive geometry projections
12. Analyze ASME dimensioning techniques
13. Analyze ASME tolerancing techniques
14. Analyze orthographic projection
15. Apply standard parts
16. Apply standard engineering data
17. Analyze design of springs
18. Analyze thread systems
19. Create assemblies
20. Prepare formal drawings from layouts
21. Prepare formal drawings from sketches
22. Prepare formal drawings from verbal instructions

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted