

Minnesota State College Southeast

MACH 1625: Engineering Drawings 2

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers the fundamentals of intermediate/advanced blueprint reading. The student will learn skills to interpret drawings and sketches that would be used in industry. Topics of study will be sketching, dimensioning, geometric tolerancing, section views, working drawings, and cad styles. (Prerequisites: MACH1605) (2 Credits: 2 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 01/27/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Orthographic projection
2. Special views
3. Fasteners
4. Casting prints
5. Welding prints
6. Geometric tolerancing and dimensioning

D. LEARNING OUTCOMES (General)

1. Demonstrate professionalism
2. Explain machine shop safety
3. Describe casting
4. Describe auxiliary views
5. Describe surface texture
6. Describe running/sliding/press fits
7. Describe welding symbols
8. Describe dimensioning techniques
9. Describe geometric tolerance
10. Identify geometric symbols
11. Interpret blueprints
12. Interpret dimensional types
13. Identify section views
14. Describe dimensioning types
15. Identify positional dimensioning
16. Identify title block information
17. Interpret threaded fasteners
18. Complete all drawings and sketches
19. Interpret taper specifications
20. Interpret hole dimensions
21. Interpret running/sliding/press fits
22. Interpret screw thread applications
23. Interpret structural steel shapes
24. Interpret welding symbols
25. Sketch missing views
26. Interpret pin fasteners
27. Complete final exam

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

This course was previously called Blueprint Reading 2.