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.