MDAD 1206: Geometric Tolerances

A. COURSE DESCRIPTION

   Credits: 3
   Lecture Hours/Week: 3
   Lab Hours/Week: *.*
   OJT Hours/Week: *.*

   Prerequisites:
   This course requires the following prerequisite
   MDAD 1250 - Print Reading for CAD Design

   Corequisites: None
   MnTC Goals: None

   This course covers the application and implementation of Geometric Tolerancing ASME Y14.5M-1994. Topics include: fundamentals, form, orientation, runout, datums, location, and position tolerances. The course will follow the text. (Prerequisite: MDAD1250 or instructor approval) (3 credits: 3 lecture/0 lab)

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

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)
   1. Qualify datum reference frames
   2. Analyze RFS
   3. Analyze MMC
   4. Analyze LMC
   5. Describe how the geometric system works
   6. Analyze position tolerance verification
   7. Analyze limits of size rules
   8. Analyze datum reference frames
  10. Select datum reference frames
  11. Analyze tolerance stackup
  12. Apply datum reference frames
  13. Analyze form tolerances
  14. Analyze orientation
  15. Analyze profile tolerances
  16. Analyze position tolerances
  17. Analyze coaxial controls
  18. Analyze non-cylindrical controls
  19. Analyze fixed fastener formulas
  20. Analyze floating fastener formulas
  21. Arrange datum modifiers
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted