

Minnesota State College Southeast

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
9. Analyze ASME Y14.5-1994 dimensioning
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