

Course Outline

DEN 432 Advanced Geometric Dimensioning and Tolerancing (GD & T) Level III

While there is no set method of preparing for this course, having taken the previous ASME Basic GDT course followed by many opportunities to apply basic GDT in a work environment has assured success in the past. Generally, more application experience is better. Knowledge of the following is required:

- understand drawing title block information
- understand orthographic projection
- understanding general dimensioning
- know the fundamental dimensioning rules
- have a basic understanding of geometric dimensioning and tolerancing
- have a basic understanding of how drawings are used by the areas of Design, Tooling, Production, and Inspection
- have a need to learn geometric dimensioning

Course Description:

In addition to the course modules, online quizzes are included and should be taken by the end of Thursday each week. The quizzes should be graded by Friday morning. Application drawings are provided to give you a chance to test your understanding of the material. Solutions to the applications drawings are provided for comparison. Fridays are a good day to discuss the material by email or phone. Use the Communication section or Faculty Information section of Blackboard to contact your instructor.

Course Schedule:

Following is the schedule of topics for this course.

Week 1 - Introduction

Week 2 - Position - Floating

Week 3 - Position - Zero Tolerance
- Position - Fixed

Week 4 - Position - Size Datums

Week 5 - Position - Composite & Two Single Segment FCF
- Non-Cylindrical Tolerance Zone

Week 6 - Dimensional Management
- Dimensional Analysis

Required Texts/Materials:

ASME Y14.5M-1994 Dimensioning and Tolerancing standard. You may order this standard from: 1-800-THE-ASME.

Class Participation:

Reading the course material, taking the test in a timely fashion, completing the drawings, contributing to discussions, and sending email constitutes *participation* in this course. The more you participate, the more you learn.