



Course Description:

CADD-142 - Modern Dimensioning and Tolerancing **Units: 2**

CADD 142 is a theory course that focuses on a study of dimensioning and tolerancing based on ASME Y14.5M-1994 standards. Emphasis will be given to geometric dimensioning and tolerancing concepts, tolerance studies, general dimensioning and tolerancing techniques and theory. An introduction to the newest related standard, ASME Y14.41-2003 Digital Product Definition Data Practices, will be included.

Lecture Hours: 2 Lab Hours: None Repeatable: No Grading: O

Recommended: Prior knowledge of drafting and/or manufacturing processes.

CAN: None

Advisory Level: Read: 2 Write: 2 Math: 1

Transfer Status: None Degree Applicable: AS

CSU GE: None District GE: None IGETC: None

Learning Outcomes:

- A. Apply geometric dimensioning and tolerancing characteristics to a drawing.
- B. Determine information necessary to indicate that a certain geometric tolerance control is being used.
- C. Identify symbology used in geometric dimensioning and tolerancing.
- D. Analyze an object - while considering form, function and manufacturing aspects of the object - to determine appropriate geometric tolerancing controls.
- E. Perform typical tolerancing calculations.
- F. Use the circuit diagram procedure for conducting tolerancing studies.
- G. Identify the differences between the various geometric tolerancing characteristics.
- H. Describe the general scope of the ASME Y14.41-2003 standard.