

MECH 1570 : Dimensional Metrology

Introduction to ANSI Y-14.5M standard for geometric dimensioning and tolerancing (GD&T) and various inspection, measurement and testing methods. Includes use of basic inspection tools (rules, verniers, micrometers, dial calipers, indicators), gage blocks, surface plates, bore gages, fixed gages, sine plate, digital height gages, transfer gages, profilometer, optical comparator and coordinate measuring machines (CMM). using software PC-DMIS. Calibration methods and measurement system analysis (MSA) techniques are covered. Field trip to industrial metrology department. Lecture/laboratory. Prerequisite: MECH 1050 and either MACH 1040 or TECH 1080. Lab fee.

Credits 0.0-3

Semester Offered

Spring