



CMM Inspection Techniques & PC-DMIS Programming

LENGTH

Enter # of weeks 10 # of sessions/week 1 # of hours per session 4 Total: 40 Hours

AUDIENCE

This course is designed for inspectors, machinists and shop employees who need to develop the skills and techniques to inspect parts using the Coordinate Measuring Machine (CMM.) Prepare inspection programs for a fully automated CNC Driven CMM.

RECOMMENDED PREREQUISITES

Participants should be familiar with Blueprint Reading and Basic Shop Math and using a computer.

TOPICS

- ❶ **CMM Machine Basics**
 - Setting up the probe
 - Calibrating the probe
 - Creating a manual alignment
 - Creating a DCC alignment (Dynamic Computer Control)
 - Establishing inspection datums
 - Inspecting dimensions, length and size
 - Inspecting holes

- ❷ **Unlocking PC-DMIS**
 - Introduction to the PC-DMIS Interface
 - Multi axis probe definitions
 - Importing a CAD model
 - Aligning the CAD model to the system
 - Creating the manual and DCC alignments offline
 - Programming datums, clearance planes and special moves
 - Programming using auto features
 - Using PC-DMIS to analyze the model
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- ❸ **CMM Programming and Applications**
 - Part programming and inspection project
 - Importing the part, setting up alignments
 - Developing the inspection plan
 - Programming the part offline
 - Preparing the CMM Inspection report offline
 - Run inspection on the CMM
 - Evaluation of project and making changes and adjustments