

# Managing Calibration Programs Course Outline

## Lesson 1 | Formal Instrument Management

- Identify the components of a good calibration program.
- Explain why many industry standards require formal measurement device management programs.

## Lesson 2 | Sources of Measurement Error

- Explain the four major categories of measurement error: calibration, usage or handling damage, errors of judgment, measurement system variation.
- Know what to do about sources of measurement error.

## Lesson 3 | Calibration Practices

- Understand the requirements of a measurement calibration system as defined by ISO 10012.
- Establish calibration procedures to check the calibration of a measurement device.

## Lesson 4 | Calibration Standards & Tools

- Understand the traceability route of measurement standard back to primary national standards and ISO.
- Select measurement standards appropriate for the measuring device.

## Lesson 5 | Calibration Pitfalls

- Become familiar with the 7 most common calibration pitfalls.
- Overcome calibration pitfalls.

## Lesson 6 | Records & Audits

- Establish comprehensive records needed to document the management of measurement devices.
- Develop an audit system to ensure the measurement management system is being used correctly.

## Lesson 7 | Calibration Software Considerations

- Explore common options of measurement management software.
- Evaluate measurement management software to select the software program that best fits the needs of your organization.

## Challenge

- An assessment of the learner's progress in this course.