

Course Objectives

Laboratory Management Course

ISO/IEC 17025:2017 “General requirements for the competence of testing and calibration laboratories”

Learning Objectives: This course will help the participants to:

- Understand the requirements of ISO/IEC 17025:2017 as applied to calibration/testing laboratories; and
- Develop a quality system which can improve the laboratory operations to meet the needs of their clients understand the SAC requirements for accreditation

Duration: Up to 3 days

PART A: ISO/IEC 17025:2017:

Description: This course is a comprehensive review of the philosophies and requirements of this international Standard. The participant will gain an understanding of conformity assessment using the risks and opportunities-based approach.

Outline & Outcomes: After successful completion of the course, the participant will be able to:

1. Describe the structure of the Standard as it relates to process flow
2. Understand the requirements as applied to laboratories as defined in the Standard
3. Apply the additional SAC requirements to pertinent clauses within the Standard
4. Describe and apply the process-based approach;
5. Explain new concepts such as: a. Continual Improvement (using PDCA, objectives and KPIs); b. Verification and Validation; c. Decision Rules; d. Principles of Impartiality; and e. Risk-Based Thinking
6. Analyze scenarios to identify non-conformities, risks, and opportunities related to the requirements in the standard;
7. Analyze sample calibration records to demonstrate metrological traceability; and 8. List the areas where Documents and Records are required

PART B: Understanding Your Quality Management System:

Description: During this course, the participant will gain an understanding of the basic concepts of management system documentation structure, content, and development using the process-based approach and risk-based thinking. The participant will also practice developing processes, Standard Operation Procedures (SOPs), and applying mechanisms to control, review, and update documents on an ongoing basis.

Outline & Outcomes: After successful completion of the course, the participant will be able to:

1. Identify terms used in conformity assessment Standards which refer to a “Document”;
2. Define and differentiate document terms;
3. Identify requirements for documents;

4. Define the sources of input (clients) and input requirements for developing the documents
5. Identify and evaluate the risks associated with the process
6. Establish key objectives and monitoring tools to ensure success in implementation of the document
7. Employ document writing and control techniques; and
8. Describe different document design formats, including LIMS