



ISO/IEC 17025 Lab Quality Management & Internal Auditing

Introduction

Laboratory accreditation covers the quality systems elements addressed in ISO 9001 certification. To ensure continued compliance, accredited laboratories are regularly re-examined to check that they are maintaining their standards of technical expertise. These laboratories may also be required to participate in regular proficiency testing programs as an on-going demonstration of their competence. Laboratory accreditation thus provides a means of evaluating the competence of laboratories to perform specific types of testing, measurement and calibration. It also allows a laboratory to determine whether it is performing its work correctly and to appropriate standards. Manufacturing organizations may also use laboratory accreditation to ensure the testing of their products by their own in-house laboratories. Very importantly, laboratory accreditation provides formal recognition to competent laboratories, thus providing a ready means for customers to find reliable testing and calibration services able to meet their needs

Many countries rely on a process called Laboratory Accreditation as a means of determining technical competence. Laboratory accreditation uses criteria and procedures specifically developed to determine technical competence. Special technical assessors conduct a thorough evaluation of all factors in a laboratory that affect the production of test or calibration data. The criteria are based on the internationally accepted standards ISO/IEC 17025 for industrial (testing & calibration labs) laboratories which are used for evaluating laboratories throughout the world. Laboratory accreditation bodies use this standard specifically to assess factors relevant to a laboratory's ability to produce precise, accurate test and calibration data, including:

- Technical competence of staff
- Validity and appropriateness of test methods
- Traceability of measurements and calibrations to national standards
- Suitability, calibration and maintenance of test equipment



- Testing environment
- Sampling, handling and transportation of test items
- Quality assurance of test and calibration data

Who Should Attend?

Lab Managers and Supervisors, Chemists and Technicians, Health & Safety and Environmental Professionals, staff responsible for managing hazardous wastes, staff responsible for contamination issues, Laboratory Technicians, Analytical Laboratory Professionals, Laboratory Staff, Superintendents, Supervisors, Engineers, Chemists and Analysts

Course Objectives:

By the end of this course delegates will be able to:

- Laboratories with a detail concept of accreditation to ISO/IEC 17025:2005
- The key aspects associated with the accreditation process
- Accreditation process implementation strategies
- Selection of the most appropriate among various options
- Management and leadership skills
- How laboratory personnel prepare for accreditation
- Initial assessment & internal audit with important information regarding ISO/IEC 17025:2005

Course Outline:

- Introduction to Laboratory Accreditation and Overview of ISO/IEC 17025:2005
- Management and leadership skills for the lead implementer
- Organizing all the quality activities of the laboratory Interpretation
- Explanation and techniques of implementation of Quality System Management Requirements of ISO/IEC 17025 Interpretation
- Explanation and techniques of implementation of Quality System Technical requirements of ISO/IEC 17025
- Choices of the appropriate implementation strategies
- Internal audit techniques and comprehensive process from planning to follow up measures