ISO/IEC 17025:2017 LABORATORY QUALITY MANAGEMENT SYSTEM (LQMS) AND INTERNAL AUDITING TRAINING

This course aims to give an understanding of the general requirements for the competence of the laboratory and its staff to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, nonstandard methods and laboratory methods. This International Standard is applicable to all organizations performing test(s) and/or calibration(s). These include laboratories with different levels of independence and organisations where laboratory activities form part of inspection or product certification.

It will also ensure an understanding of an effective internal audit system in the laboratory and covers the requirements of ISO 19011 and additional accreditation requirements. Practical in-house examples provides confidence when conducting these audits to ensure continual improvement of the current laboratory system and preparation of upcoming external assessments.

It is applicable to all laboratories regardless of the number of personnel or the extent of the scope of testing and/or calibration activities. It is for use by laboratories in developing their management system for quality, administrative and technical operations. The training includes the additional accreditation requirements as set out in the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act 19 of 2006).

THE COURSE WILL RUN OVER A PERIOD OF 5 DAYS

ON COMPLETING THIS COURSE, THE PARTICIPANT WILL BE ABLE TO:

- Develop competency and prepare for external assessments.
- Identify relevant performance monitoring approaches.
- Continually improve data quality and management system effectiveness.
- Understand the principles of Internal auditing as described in ISO 19011.
- Development of an internal audit programme
- Preparation and conduct of internal audits based on requirement of ISO/IEC 17025:2012 and additional accreditation requirements.
- Identifying, writing and grading of non-conformances
- Evaluation of corrective action and preventive action for appropriateness.

WHO SHOULD ATTEND THIS COURSE:

- Laboratory Managers/ supervisors
- Quality and/or Technical managers
- Internal auditors
- Any other staff involved with QMS implementation and improvement.
# COURSE CONTENT:

## DAY 1

1. **INTRODUCTION**
2. **UNDERSTANDING ACCREDITATION AND ISO/IEC 17025:2017**
   - Laboratory accreditation process and requirements
   - Documentation requirements
3. **ISO/IEC 17025:2017 GENERAL REQUIREMENTS**
   - Impartiality
   - Confidentiality
4. **ISO/IEC 17025:2017 STRUCTURAL REQUIREMENTS**

## DAY 2

1. **ISO/IEC 17025:2017 RESOURCE REQUIREMENTS**
   - General
   - Personnel
   - Laboratory facilities and environmental conditions
   - Equipment
   - Externally provided products and services
   - Metrological traceability
2. **ISO/IEC 17025:2017 PROCESS REQUIREMENTS**
   - Review of requests, tenders and concepts
   - Selection, verification and validation of methods
   - Sampling
   - Handling of test or calibration items
   - Technical records
   - Evaluation of uncertainty of measurement
   - Analysis of the results
   - Assuring the quality of results
   - Reporting of results
   - Complaints
   - Management of non-conforming work
   - Control of data - information management

## DAY 3

1. **ISO/IEC 17025:2017 MANAGEMENT SYSTEM REQUIREMENTS**
   - Options
   - Management system documentation
   - Control of management system documents
   - Control of records
   - Actions to address risks and opportunities
   - Improvement
   - Corrective action
   - Internal audits
   - Management reviews
2. **THEORY (ISO 19011)**
   - Definitions
   - Principles of auditing

## DAY 4

1. **THEORY (ISO 19011) CONTINUE**
   - Managing and audit programme
   - Performing an audit
   - Competence and evaluation of auditors
2. **PRACTICAL DEMONSTRATION (ISO/IEC 17025:2017)**
   - Management system audit

## DAY 5

1. **PRACTICAL DEMONSTRATION (ISO/IEC 17025:2017)**
   - Vertical assessment
   - Witnessing of activity
   - Proficiency testing
2. **ASSESSMENT (TEST)**