Chrom Africa

Bringing Scientific & Technical Resources to the Africa Continent

# ISO/IEC 17025:2017 IMPLEMENTATION COURSE

**23rd - 27th FEBRUARY 2026**

## Course overview

This 5-Day ISO/IEC 17025:2017 Implementation Course provides a practical understanding of the ISO/IEC 17025:2017 (Third Edition) requirements and their application in testing and calibration laboratories. The training equips participants with the essential knowledge and tools to establish, implement, and maintain a competent and compliant laboratory management system. Participants will review the standard's key clauses—including impartiality, confidentiality, resources, processes, and management system requirements—while receiving hands-on guidance on documentation, risk-based thinking, method validation/verification, measurement uncertainty, internal audits, corrective actions, and continual improvement. Through real-case examples, group exercises, and implementation templates, participants gain confidence in translating requirements into practical laboratory processes and preparing their organizations for accreditation and ongoing compliance.

## Learning Outcomes:

To equip participants with advanced, practical competencies required to implement and maintain a robust management and technical system aligned with the ISO/IEC 17025:2017 (Third Edition). The program emphasizes risk-based thinking, process approach, competency requirements, validation, measurement uncertainty, and continual improvement practices relevant to modern laboratory operations.

## Target Audience:

This course is ideal for laboratory managers, quality managers, technical staff, auditors, and individuals responsible for establishing, maintaining, or improving a laboratory management system in line with international best practices.

| Day 1 | 23-02-26 | EVENTS |
|---|---|---|
| 09:00 – 10:00 am | | *Orientation and Climate Setting.* |
| 10:00 – 10:30 am | | **Introduction, Framework, and Context of ISO/IEC 17025:2017**<br>**Opening Session**<br>• Welcome and course overview<br>• Participant expectations & pre-assessment<br>• Structure of the ISO/IEC 17025:2017 standard (Third Edition) |
| 10:30 – 11:00 am | | *TEA- BREAK* |
| 11:00 – 12:30 p.m | | **Foundation Concepts**<br>• Purpose, scope, and application of ISO/IEC 17025<br>• Key changes introduced in the Third Edition<br>• Risk-based thinking and process-based approach<br>• Relationship with ISO 9001 and other standards |
| 12:30 – 14:00 p.m | | *LUNCH - BREAK* |
| 14:00 – 16:30 p.m | | **Clause-by-Clause Understanding/Overview**<br>• Clause 4: General requirements (impartiality, confidentiality) & Clause 5: Structural requirements<br>• Identifying risks to impartiality in laboratory operations<br>• Mapping laboratory structure to ISO/IEC 17025 requirements |

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| Day 2 | 24-02-26 | EVENTS |
|---|---|---|
| 09:00 – 10:30 am | | **Resource Requirements & Process Controls**<br>**Clause 6: Resource Requirements**<br>• Personnel competence, authorization, and training programs<br>• Facilities, environmental conditions/controls &Traceability of measurements<br>• Equipment selection, calibration, maintenance, and metrological traceability according to Third Edition changes<br>• Purchasing services & external providers<br>• External calibration, reference materials, and supplier evaluation and updated expectations regarding equipment and reference standard management from the Third Edition |
| 10:30 – 11:00 am | | *TEA- BREAK* |
| 11:00 – 12:30 p.m | | **Clause 7 (Part 1): Process Requirements**<br>• Review of requests, tenders & contracts<br>• Method selection, validation, and verification<br>• Sampling requirements, Handling of test and calibration items |
| 12:30 – 14:00 p.m | | *LUNCH - BREAK* |
| 14:00 – 16:30 p.m | | • Competence matrix development, Equipment calibration/verification planning<br>• Prepare a draft equipment management program & designing a competency qualification checklist for analysts |

| Day 3 | 25-02-26 | EVENTS |
|---|---|---|
| 09:00 – 10:30 am | | **Technical Processes, Quality Control & Reporting Results**<br>**Clause 7 (Part 2): Technical and Process Implementation**<br>• Technical records<br>• Measurement uncertainty evaluation<br>• Ensuring valid results (quality control, PT/ILC participation)<br>• Quality control and assurance of results:<br>• Reporting of results (test reports, calibration certificates) |
| 10:30 – 11:00 am | | *TEA- BREAK* |
| 11:00 – 12:30 p.m | | **Evaluation of Measurement Uncertainty**<br>• Principles of MU in testing and calibration & Practical MU calculation demonstration<br>• Microbiology, molecular, chemical, and instrumental examples |
| 12:30 – 14:00 p.m | | *LUNCH - BREAK* |
| 14:00 – 15:30 p.m | | **Ensuring Validity of Results**<br>• Internal quality controls<br>• Use of CRMs, reference strains, blanks, duplicates<br>• Trend analysis and control charts |

| Day 4 | 26-02-26 | EVENTS |
|---|---|---|
| 09:00 – 10:30 am | | **Management System Requirements**<br>**Clause 8: Management System Implementation Options**<br>• Option A vs Option B (ISO 9001 alignment)<br>• Documentation structure: policies, procedures, SOPs, forms<br>• Document control & record management<br>• Actions to address risks and opportunities (risk register updates) |
| 10:30 – 11:00 am | | *TEA- BREAK* |
| 11:00 – 12:30 p.m | | **Internal Audits**<br>• Audit principles (ISO 19011 guidance), Audit planning, conducting, reporting, and follow-up<br>• Managing audit findings and evidence collection |
| 12:30 – 14:00 p.m | | *LUNCH - BREAK* |
| 14:00 – 15:30 p.m | | **Management Reviews**<br>• Inputs, outputs of management reviews & Continual improvement mechanisms |

| Day 5 | 26-02-26 | EVENTS |
|---|---|---|
| 09:00 – 10:30 am | | **Implementation Planning, Accreditation Readiness & Final Assessment**<br>**Implementation Roadmap**<br>• Building a laboratory implementation plan, Gap assessment and corrective action strategies<br>• Resource planning for ISO 17025 accreditation & Communication with accreditation bodies |
| 10:30 – 11:00 am | | *TEA- BREAK* |
| 11:00 – 12:30 p.m | | **Accreditation Assessments**<br>• What assessors look for<br>• Handling nonconformities during an assessment<br>• Evidence presentation & assessor interaction skills |
| 12:30 – 14:00 p.m | | *LUNCH - BREAK* |
| 14:00 – 15:00 p.m | | **Integration & Continual Improvement**<br>• Laboratory practices and digitalization opportunities<br>• Risk-based quality management in daily operations &Sustaining compliance post-accreditation<br>• Recap of the course, closing ceremony and issuance of certificates. |

Online Training available at: www.chromafrica.com

**Deadline: 13th Feb 2026**

**23rd - 27th FEBRUARY 2026**

**Cost Kes. 125,000.00 or USD 1,200.00 exclusive of taxes**

**NAIROBI**

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