ISO/IEC 17025:2017 IMPLEMENTATION & DOCUMENTING TRAINING

Course Title: SO/IEC 17025:2017 Implementation & Documenting Training

Course Validity: 2 Days

Validity: Not Applicable

HRD Corp Scheme: Claimable

INTRODUCTION

ISO/IEC 17025:2017 is the international standard for testing and calibration laboratory competence. This implementation-focused programme equips participants with practical skills to develop, implement, and maintain laboratory documentation and processes that meet accreditation requirements. Participants will learn how to interpret clauses, write required procedures, establish traceability systems, validate methods, control equipment, evaluate measurement uncertainty, ensure quality of results, and prepare audit-ready records for SAMM/ILAC accreditation.

OBJECTIVE(S):

- Understand implementation requirements of ISO/IEC 17025:2017.
- Develop full laboratory documentation (procedures, forms, SOPs, manuals, work instructions).
- Implement traceability, calibration control & equipment management systems.
- Perform method validation, verification & measurement uncertainty calculations.
- Develop sampling plans, handling procedures & quality control techniques.
- Establish management system documentation including audits & corrective action.
- Prepare laboratory for accreditation and comply with assessor expectations.

TARGET GROUP(S):

- Laboratory Managers & Technical Managers
- Lab Technicians / Analysts
- QA/QC Personnel
- ISO/IEC 17025 Implementation Team
- Internal Auditors

ENTRY REQUIREMENT(S):

- Basic understanding of ISO/IEC 17025 or completed Awareness Training
- Familiar with general laboratory operations
- Able to read and interpret technical procedures

TOPIC(S):

1. ISO/IEC 17025:2017 Requirements & Implementation Roadmap
2. Developing Laboratory Documentation (SOPs, Procedures, Forms, Manuals)
3. Resource Requirements – Competence, Facilities, Equipment & Reference Standards
4. Establishing Metrological Traceability & Calibration Control
5. Process Requirements – Method Selection, Validation & Verification
6. Measurement Uncertainty – Concepts, Components & Calculation Methods
7. Sampling, Handling, Transport & Storage Procedures
8. Ensuring Quality of Results – Proficiency Testing, QC Checks, Control Charts
9. Management System Documentation – Internal Audit, Corrective Action, Risks & Opportunities
10. Accreditation Preparation – Assessor Expectations & Evidence Compilation

LIST OF REFERENCE BOOK(S):

- ISO/IEC 17025:2017 Standard

- ILAC & SAMM Guidelines (MS ISO/IEC 17025 SAMM Requirements)

- ISO 9001:2015 (for supporting management system structure)

- Laboratory method validation and uncertainty calculation guides

LIST OF TEACHING AID(S):

- LCD projector

- Computer

- Whiteboard & markers

- Document templates (procedures, forms, logs, SOPs)

- Calibration & uncertainty worksheets

- Case study datasets

METHODOLOGY(S):

- Lecture

- Documentation development workshop

- Case study analysis

- Practical exercises (uncertainty, validation, traceability)

- Group discussion

- Q&A and assessor expectation briefing

MTBM

TRAINING SCHEDULE

Day 1

Time	Activity/Topic
8:30 am – 9:00 am	Registration & Introduction
9:00 am – 10:30 am	Topic 1: ISO/IEC 17025 Requirements & Implementation Roadmap
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 12:30 pm	Topic 2: Developing Laboratory Documentation (Policies, SOPs, Procedures)
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 3: Resource Requirements – Competence, Facilities & Equipment Control
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Workshop: Creating Required Laboratory SOPs & Forms

TRAINING SCHEDULE

Day 2

Time	Activity/Topic
8:30 am – 9:00 am	Recap of Day 1
9:00 am – 10:30 am	Topic 4: Method Validation, Verification & Measurement Uncertainty
10:30 am – 10:45 am	**Morning Tea Break**
10:45 am – 12:30 pm	Topic 5: Ensuring Quality of Results – PT, QC, Control Charts
12:30 pm – 1:30 pm	**Lunch Break**
1:30 pm – 3:30 pm	Topic 6: Management System Documentation – Audit, CAR, Risks, MR
3:30 pm – 3:45 pm	**Afternoon Tea Break**
3:45 pm – 5:00 pm	Practical Assessment: ISO/IEC 17025 Implementation & Documentation Simulation