



## **ISO/IEC 17025:2017 RISK ASSESSMENT TRAINING**



MTBM Group Sdn. Bhd. (1600656-M)

Level 8, MCT Tower, Sky Park, One City, Jalan USJ 25/1, 47650 Subang Jaya, Selangor

**Course Title:** ISO/IEC 17025:2017 Risk Assessment Training

**Course Validity:** 2 Days

**Validity:** Not Applicable

**HRD Corp Scheme:** Claimable

## **INTRODUCTION**

This program provides participants with a systematic approach to understanding and applying risk-based thinking as required under ISO/IEC 17025:2017. The course covers laboratory-specific risks related to impartiality, technical activities, sampling, measurement processes, equipment, data integrity, and environmental conditions. Participants will learn how to identify, assess, evaluate, and treat risks in testing and calibration laboratories. Practical workshops guide attendees in developing laboratory risk registers, applying suitable risk analysis tools, and integrating risk management within laboratory processes and continual improvement mechanisms.

## **OBJECTIVE(S):**

- Understand the ISO/IEC 17025:2017 requirements for risk-based thinking and impartiality.
- Learn how to identify laboratory risks in technical processes, management systems, and operations.
- Apply risk assessment tools such as likelihood–severity matrices, FMEA, and cause analysis.
- Develop risk registers for laboratory activities (testing, calibration, sampling, reporting).
- Learn how to implement risk controls and monitor their effectiveness.
- Integrate risk assessment into decision-making, method validation, equipment management, and QMS improvement.

**TARGET GROUP(S):**

- Laboratory Managers & Supervisors
- Analysts, Technicians & QA/QC Personnel
- Internal Auditors & Technical Assessors
- Compliance Officers
- Personnel responsible for laboratory operations or quality systems

**ENTRY REQUIREMENT(S):**

- Able to read, write, and communicate in Malay/English
- Basic understanding of chemical testing or laboratory operations

**TOPIC(S):**

1. Overview of ISO/IEC 17025:2017 Risk-Based Thinking
2. Understanding Risks Related to Impartiality
3. Identifying Risks in Technical and Managerial Processes
4. Risk Assessment Tools (Likelihood, Severity, FMEA, Cause Analysis)
5. Developing the Laboratory Risk Register
6. Risk Controls & Mitigation Strategies
7. Monitoring, Reviewing, and Improving Risk Controls
8. Integrating Risk Assessment into Laboratory Decision-Making

**LIST OF REFERENCE BOOK(S):**

- ISO/IEC 17025:2017 Standard
- ISO 31000:2018 Risk Management Principles
- ILAC Guidance on Impartiality & Risk-Based Approaches

**LIST OF TEACHING AID(S):**

- LCD projector
- Computer
- Whiteboard with accessories

**METHODOLOGY(S):**

- Lecture
- Group discussions
- Case studies
- Practical risk assessment workshop

## TRAINING SCHEDULE

### Day 1

Time	Activity / Topic
8:30 am – 9:00 am	Registration and Introduction
9:00 am – 9:45 am	Topic 1: Overview of ISO/IEC 17025 & Risk-Based Thinking
9:45 am – 10:30 am	Topic 2: Impartiality Requirements & Related Risks
10:30 am – 10:45 am	<b>Morning Tea Break</b>
10:45 am – 11:30 am	Topic 3: Identifying Laboratory Risks (Processes & Technical Activities)
11:30 am – 12:30 pm	Topic 4: Types of Risks (Operational, Technical, Environmental, Data Integrity)
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 2:30 pm	Topic 5: Risk Assessment Tools (Matrix, FMEA, Bow-Tie Concepts)
2:30 pm – 3:30 pm	Topic 6: Likelihood, Severity & Risk Rating Methods
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Workshop: Identifying Risks in Laboratory Operations

## TRAINING SCHEDULE

### Day 2

Time	Activity / Topic
8:30 am – 9:00 am	Recap of Day 1
9:00 am – 9:45 am	Topic 7: Developing the Laboratory Risk Register
9:45 am – 10:30 am	Topic 8: Implementing Risk Controls & Mitigation Plans
10:30 am – 10:45 am	<b>Morning Tea Break</b>
10:45 am – 11:30 am	Topic 9: Monitoring & Reviewing Risk Controls
11:30 am – 12:30 pm	Topic 10: Integrating Risk Assessment in ISO/IEC 17025 Processes
12:30 pm – 1:30 pm	<b>Lunch Break</b>
1:30 pm – 2:30 pm	Topic 11: Risk Assessment for Method Validation, Equipment & Reporting
2:30 pm – 3:30 pm	Topic 12: Risk-Based Decision-Making & Continual Improvement
3:30 pm – 3:45 pm	<b>Afternoon Tea Break</b>
3:45 pm – 5:00 pm	Final Workshop: Completing a Full Laboratory Risk Assessment