



ISO/IEC 17025 Foundation Certification Course

28 June – 2 July 2027
Singapore

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Ref: 103600606_107290 **Date:** 28 June – 2 July 2027 **Location:** Singapore **Fees:** 6500 Euro

Overview

Laboratories providing testing and calibration services require rigorous operational controls to ensure data integrity, impartiality, and technical competence. The ISO/IEC 17025 Foundation Certification Course delivers a thorough introduction to the core principles, architecture, and requirements of a Laboratory Management System. Participants explore the standard's structural elements, resource parameters, and process operations without the operational complexity of advanced implementation roles. The curriculum clarifies how standard operating procedures, technical records, and equipment tracking establish defensible measurement results. This training is delivered by Agile Leaders Training Center.

Who Should Attend

- Laboratory technicians and testing analysts seeking foundational comprehension of standard requirements.
- Quality officers and compliance coordinators assisting with internal laboratory documentation.
- Section heads and laboratory supervisors overseeing routine calibration and testing workflows.
- Personnel preparing to support quality control and management review activities within testing environments.
- Professionals entering laboratory environments who require a structured overview of compliance governance.

Departments and Industries

This programme benefits analytical, operational, and regulatory personnel across technical testing environments.

- Analytical Testing and Metrology Laboratories
- Quality Assurance and Quality Control Departments
- Pharmaceutical and Biotechnology Manufacturing Facilities
- Food Safety and Agricultural Testing Laboratories
- Environmental Monitoring and Industrial Analysis Units

Learning Objectives

By the end of this course, participants will be able to:



- Explain the purpose, structure, and foundational principles governing a Laboratory Management System.
- Identify core structural, resource, and process requirements defined under ISO/IEC 17025.
- Differentiate between instructional documents and technical evidentiary records within testing workflows.
- Apply rigorous document control practices to manage standard operating procedures and master lists.
- Review calibration status, traceability records, and equipment logs to verify technical compliance.
- Recognize the purpose of internal audits, corrective actions, and structured management reviews.

Course Agenda

Day 1: Introduction to Laboratory Management Systems

- Fundamentals and scope of testing and calibration laboratories under international standards
- Core principles of impartiality, operational confidentiality, and testing consistency
- Key structural distinctions between technical testing methods and overarching quality policies
- Foundational terminology and baseline governance expectations for laboratory operations
- Orientation on standard management system concepts and introductory syllabus objectives

Day 2: Core Requirements and Resource Controls

- Organizational governance, operational independence, and defined technical responsibilities
- Resource parameters covering personnel qualifications, training logs, and facility conditions
- Equipment inventory management, maintenance intervals, and calibration status tracking
- Process parameters for sample handling, test requests, and selection of standard methods
- Verification workflows, sample preservation rules, and item integrity procedures

Day 3: Laboratory Documentation and Document Control

- Distinctions between instructional quality documents and operational evidentiary records
- Formulation of quality policies, measurable laboratory objectives, and management commitments
- Structure of standard operating procedures, test methods, work instructions, and manual templates
- Document approval protocols, distribution tracking, revision controls, and obsolescence management
- Creation and maintenance of the master document register and administrative hierarchies

Day 4: Technical Records and Traceability Evidence

- Record retention controls including archival security, data backup, retrieval, and disposal
- Structure of technical records, capture of primary observations, and calculation logs
- Documentation of personnel competence authorizations, supervision, and ongoing reviews
- Traceability records, external calibration certificates, and reference standard verifications
- Logging nonconforming test occurrences, client complaint workflows, and corrective actions



Day 5: Management Review and Compliance Awareness

- Fundamentals of internal laboratory reviews and assessment of operational consistency
- Management review agendas, required informational inputs, and actionable improvement outputs
- Continual improvement pathways, preventive risk measures, and process modifications
- Common foundational compliance oversights identified during routine operational reviews
- Synthesis of core standard concepts and consolidated foundational knowledge review

Practical Exercises

Participants engage in structured tabletop exercises and scenario reviews to reinforce syllabus concepts.

- Suggested activity: Review a draft standard operating procedure against document control criteria to identify revision gaps.
- Suggested activity: Distinguish between operational documents and evidentiary records using a sample laboratory workflow.
- Suggested activity: Audit a simulated equipment calibration register to identify traceability and status deficiencies.
- Suggested activity: Construct an internal review agenda incorporating mandatory operational and corrective action inputs.

FAQs

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

There are no formal prerequisites required for enrollment. Basic familiarity with general laboratory practices, testing environments, calibration activities, or fundamental quality control concepts will assist learners in relating the topics to workplace procedures.

How long is each day's session, and is there a total number of hours required for the entire course?

Sessions run for approximately 4 to 5 hours per day across the 5 days, providing roughly 20 to 25 total hours of guided instruction, interactive discussions, and practical exercises.

Is ISO/IEC 17025 Foundation the same as ISO/IEC 17025 Lead Implementer or Lead Assessor?

No. The Foundation training provides foundational awareness of standard terminology, structural clauses, and baseline documentation concepts. Lead Implementer courses focus extensively on project planning, policy design, and execution, whereas Lead Assessor programmes concentrate on conducting formal assessments and managing audit teams.



Conclusion

Completing this foundational programme equips laboratory professionals with an objective understanding of quality structures and record integrity. Participants depart with practical clarity on standard operating procedures, equipment traceability, and compliance maintenance, establishing a solid baseline for ongoing laboratory competence and quality operations.