Management system standards

ISO/IEC 17025:2017 — Laboratories

Two days to understand ISO/IEC 17025:2017 and prepare the accreditation of a testing, analysis or calibration laboratory. Impartiality, staff competence, equipment and metrological traceability, method validation, measurement uncertainty, decision rules, assurance of the validity of results: each requirement is applied to your methods and records, through to the gap analysis and a draft scope.

Duration : 2 days

Objectives

1. Explain the structure of ISO/IEC 17025:2017 and the accreditation path with SEMAC
2. Put in place the requirements for impartiality, confidentiality and staff competence
3. Organise equipment control and the metrological traceability of results
4. Verify or validate a method, estimate measurement uncertainty and apply a decision rule
5. Ensure the validity of results, handle nonconforming work and define a realistic scope

Programme

Day 1 — morning

• What accreditation recognises: competence, impartiality, consistent operation, on a defined scope

• In Morocco: NM ISO/IEC 17025, role of SEMAC, five-year accreditation cycle

• Structure of the standard: general, structural, resource, process and management system requirements

• Impartiality and confidentiality: risks, commitments, evidence

Day 1 — afternoon

• Personnel: competence, authorisations, supervision

• Facilities, environmental conditions and equipment

• Metrological traceability: calibrations, linkages, list of critical equipment

• Exercise: critical equipment and linkages for one method of your laboratory

Day 2 — morning

• Review of requests, selection, verification and validation of methods

• Sampling, handling of test or calibration items

• Measurement uncertainty: principles and a simplified budget

• Decision rules and statements of conformity

Day 2 — afternoon (workshop)

• Assurance of the validity of results: internal controls, interlaboratory comparisons

• Reports, complaints, nonconforming work, data control

• Workshop: gap analysis of your laboratory and draft scope

• Knowledge test and presentation of the work

Teaching methods

• Guided reading of the standard and of the accreditation documents

• Exercises on your methods, your equipment sheets and your test reports

• Guided calculation of an uncertainty budget on one measurement of your laboratory

• Case study: unsatisfactory result in an interlaboratory comparison, from analysis to corrective action

• Mid-course quiz and final test

Assessment and documents

Mid-course quiz and knowledge test at the end of the session, post-course evaluation at D+1. Numbered training certificate, verifiable online, for each participant; training report, gap analysis and draft scope from the workshop handed to the laboratory.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

The course “Metrology and Instruments” (1 day) goes deeper into the management of measuring equipment. Inspection bodies fall under another standard: see “ISO/IEC 17020:2026 — Inspection”.

Practical information

Duration	2 days
Audience	Laboratory managers, quality managers, technicians and analysts of testing, analysis and calibration laboratories
Prerequisites	No prerequisites; laboratory practice is useful
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Has the standard been revised since 2017?

No. ISO/IEC 17025:2017 remains the edition in force; in Morocco it is applied under the reference NM ISO/IEC 17025:2018.

Must all of the laboratory’s methods be accredited?

No. Accreditation covers a scope chosen by the laboratory. A first application limited to methods that are well controlled, useful to customers and well documented is often more realistic; the scope is extended afterwards.

Is the calculation of uncertainties covered in detail?

The course gives the principles and a simplified budget on one of your measurements. Calibration laboratories and complex methods require additional work, carried out method by method.

How does it differ from ISO 9001 certification?

ISO 9001:2026 certifies a management system. Accreditation under ISO/IEC 17025:2017 also recognises the laboratory’s technical competence for specific tests or calibrations, assessed by an accreditation body.