



Laboratory General Safety Foundation Training Course

17 – 21 January 2027
Johannesburg

Laboratory General Safety Foundation Training Course

Ref: 1357_200312 **Date:** 17 – 21 January 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Laboratory General Safety Foundation Training Course is a one-week course for laboratory supervisors, technicians, researchers, quality personnel, HSE staff, facilities teams, and new laboratory personnel who leave with a Laboratory Safety Action Plan. Participants apply laboratory hazard identification, laboratory risk assessment, chemical and biological safety controls, safe equipment practices, personal protective equipment, waste handling, emergency response, incident reporting, and laboratory safety inspections. Agile Leaders Training Center presents safe laboratory operations through practical control tools.

Who Should Attend

- Functions responsible for daily laboratory operations and work coordination
- Teams responsible for testing, research, sampling, and specimen handling
- Personnel responsible for quality controls, documentation, and corrective actions
- Functions responsible for occupational safety, facilities, and emergency readiness
- New laboratory personnel responsible for following safe work procedures

The course assumes participants perform or support routine laboratory work and leaves out specialist containment design, regulatory legal interpretation, and advanced hazardous-material response.

Departments and Industries

The course supports departments and industries that operate laboratories or provide safety, quality, and facilities oversight.

- Clinical, diagnostic, and public health laboratories
- Research, education, and product development facilities
- Manufacturing, food, water, and environmental testing laboratories
- Quality assurance, occupational safety, and risk functions
- Engineering, maintenance, facilities, and emergency response teams

Learning Objectives

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



- Apply a laboratory hazard identification method
- Use a laboratory risk assessment matrix to prioritize controls
- Compare chemical, biological, equipment, and electrical safeguards
- Build safe labeling, storage, PPE, and waste routines
- Analyze incidents and inspection findings for corrective action
- Build a Laboratory Safety Action Plan

Course Agenda

Day 1: Safety Foundations and Risk

- Laboratory Safety Roles and Responsibility Map
- Laboratory Hazard Identification Checklist
- Task-Based Risk Assessment Method
- Likelihood and Severity Risk Matrix
- Hierarchy of Controls Selection Guide

Day 2: Chemical and Biological Controls

- Chemical Inventory and Safety Data Sheet Review
- Container Labeling and Compatibility Storage Matrix
- Exposure Route and Containment Assessment
- Good Microbiological Practice Procedure Checklist
- Spill Prevention and Decontamination Decision Guide

Day 3: Equipment and Personal Protection

- Laboratory Equipment Pre-Use Inspection Tool
- Electrical Safety and Energy Isolation Checklist
- Personal Protective Equipment Selection Matrix
- Engineering Control Verification Record
- Housekeeping and Access Control Walkthrough

Day 4: Waste, Emergencies and Assurance

- Laboratory Waste Segregation Flowchart
- Emergency Response and Evacuation Card
- Incident Notification and Initial Report Form
- Laboratory Safety Inspection Checklist
- Corrective Action Ownership Tracker



Day 5: Laboratory Safety Practice

- Exercise: Complete a Hazard Identification Walkthrough
- Exercise: Score Risks and Select Controls
- Exercise: Review Chemical Storage and PPE Decisions
- Exercise: Respond to a Spill and Report an Incident
- Capstone Exercise: Laboratory Safety Action Plan

Practical Exercises

The course uses suggested activities from clinical, research, manufacturing, and environmental laboratory settings.

- Suggested activity: inspect a laboratory scenario and record chemical, biological, equipment, electrical, and housekeeping hazards.
- Suggested activity: score selected hazards and choose engineering, administrative, and personal protection controls.
- Suggested activity: evaluate labeling, storage, PPE, waste, and emergency decisions in a simulated work area.
- Suggested activity: build a Laboratory Safety Action Plan with actions, owners, priorities, and follow-up measures.

FAQs

What is laboratory general safety?

Laboratory general safety is the coordinated use of hazard identification, risk assessment, controls, safe procedures, protective equipment, emergency arrangements, reporting, and inspection to reduce harm during routine laboratory work.

Who suits laboratory general safety training, and what does it assume?

Laboratory general safety training suits personnel who perform or support routine laboratory work and assumes familiarity with their workplace tasks, materials, equipment, and local procedures.

How does laboratory general safety training differ from specialist biosafety training?

Laboratory general safety training covers chemical, biological, equipment, electrical, waste, emergency, and inspection controls; specialist biosafety training concentrates more deeply on biological agents, containment, and microbiological practices.



How is laboratory risk assessment used in daily work?

Laboratory risk assessment identifies task hazards, considers likelihood and severity, checks existing safeguards, prioritizes additional controls, assigns ownership, and records when the assessment needs review.

What should a laboratory safety inspection examine?

A laboratory safety inspection should examine work practices, labeling, storage, equipment condition, engineering controls, PPE, access, housekeeping, waste, emergency readiness, records, and completion of corrective actions.

Conclusion

The course connects laboratory hazard identification, risk assessment, operational controls, emergency readiness, reporting, and assurance. Participants take back a Laboratory Safety Action Plan that sets priorities, responsibilities, controls, and follow-up measures. The plan changes how laboratory teams identify hazards, organize safeguards, respond to incidents, and close inspection findings.