Operational Risk Management and HAZOP Study Training Course

24 – 28 May 2027
Milan

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Ref: 1235_191227 **Date:** 24 – 28 May 2027 **Location:** Milan **Fees:** 5700 Euro

Overview

Operational Risk Management and HAZOP Study Training Course is a one-week foundation course for operations, engineering, risk, HSE, maintenance, project, and control teams that leaves participants with a HAZOP Study File. Participants connect study scope, system boundaries, design intent, guide words, deviations, causes, consequences, safeguards, recommendations, documentation, and follow-up. The course distinguishes HAZOP from broader risk methods and turns multidisciplinary discussion into traceable actions. Agile Leaders Training Center presents operational risk management and HAZOP study as one structured review process.

Who Should Attend

- Operations functions responsible for process conditions, operating practices, and abnormal-situation response
- Engineering functions responsible for design intent, process information, modifications, and technical safeguards
- Risk and HSE functions responsible for hazard identification, control assurance, and action governance
- Maintenance and reliability functions responsible for equipment condition, failure information, and safeguard availability
- Project and control functions responsible for study planning, records, recommendations, and closure evidence

The course assumes participants can interpret basic process or system information at work and leaves out advanced consequence modeling, quantitative risk assessment, and certification preparation.

Departments and Industries

The course supports HAZOP study practice across:

- Operations, process engineering, HSE, risk, maintenance, reliability, and project departments
- Energy, chemical, manufacturing, utilities, and water organizations
- Pharmaceutical, food-processing, transport, and infrastructure organizations
- Design, construction, commissioning, and asset-management functions
- Organizations managing new systems, operating assets, or process modifications

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Learning Objectives

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

- Apply the IEC 61882 HAZOP study sequence
- Build study scope, node, and design-intent records
- Use guide words to generate credible deviations
- Analyze causes, consequences, and existing safeguards
- Evaluate recommendations and action ownership
- Prioritize documentation, follow-up, and risk-register integration

Course Agenda

Day 1: HAZOP Study Foundations

- Operational Risk and Process Hazard Context Map
- IEC 61882 HAZOP Study Procedure
- HAZOP, HAZID, FMEA, and Fault-Tree Method Comparison
- Study Objective, Boundary, and Assumption Sheet
- Multidisciplinary Team Role and Competence Matrix

Day 2: Study Preparation

- Process Information Readiness Checklist
- System Element and Study Node Register
- Design Intent and Operating Condition Statement
- Parameter and Guide-Word Selection Matrix
- Session Plan, Schedule, and Recording Protocol

Day 3: Deviation Analysis

- Guide-Word and Parameter Deviation Worksheet
- Credible Cause Identification Method
- Consequence Pathway and Escalation Map
- Engineering and Administrative Safeguard Register
- Human-Factor and Operating-Mode Prompt List

Day 4: Recommendations and Follow-Up

- Safeguard Adequacy and Gap Review
- Recommendation Quality and Priority Test
- Action Owner, Due-Control, and Closure Tracker
- HAZOP Report and Decision-Audit Trail
- Operational Risk Register Integration Map

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Day 5: HAZOP Study Practice

- Suggested Exercise: Define Scope, Nodes, and Design Intent
- Suggested Exercise: Generate Guide-Word Deviations
- Suggested Exercise: Analyze Causes, Consequences, and Safeguards
- Suggested Exercise: Record Recommendations and Closure Evidence
- Capstone Exercise: HAZOP Study File

Practical Exercises

The course uses suggested activities to practice HAZOP study decisions:

- Suggested activity: define study objectives, system boundaries, assumptions, nodes, operating modes, and the multidisciplinary team
- Suggested activity: combine parameters and guide words to produce deviations, then test credible causes and consequence pathways
- Suggested activity: assess safeguards, human factors, recommendation quality, ownership, and closure evidence
- Suggested activity: assemble a study record and connect open actions to the operational risk register

FAQs

Who does operational risk management and HAZOP study training suit, and what does it assume?

Operational risk management and HAZOP study training suits professionals who support operations, engineering, HSE, maintenance, risk, projects, or controls and assumes basic familiarity with process or system information.

How does HAZOP study training differ from enterprise risk management training?

HAZOP study training examines deviations from system design intent through structured guide words, while enterprise risk management training addresses a broader portfolio of strategic, financial, operational, and compliance risks.

What information is needed before a HAZOP study starts?

A HAZOP study needs a defined objective, boundary, system description, design intent, operating conditions, drawings or equivalent information, assumptions, previous study records, participant roles, and an agreed recording method.

How do HAZOP guide words support deviation analysis?

HAZOP guide words prompt a multidisciplinary team to test structured departures from design intent, helping it identify credible causes, consequences, safeguards, information gaps, and possible recommendations.

What makes a HAZOP recommendation traceable?

A HAZOP recommendation is traceable when it records the deviation and rationale, states the required outcome, assigns an owner, tracks resolution, documents the decision, and preserves closure evidence.

Conclusion

Participants take back a HAZOP Study File containing the study basis, node register, design-intent records, deviation worksheets, safeguard reviews, recommendations, action tracking, and report structure. The file makes multidisciplinary reasoning and decisions traceable. It helps teams prepare, conduct, document, and follow up a structured hazard and operability review.