



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

HAZOP Study for Team Leaders and Members

Custom Courses / Health, Safety and Environment (HSE)

Unit Standard AATICD-0050 · NQF Level 5 · 10 Credits · 5 Days

COURSE OVERVIEW

This course equips team leaders and members with the skills to plan, conduct, and participate in Hazard and Operability (HAZOP) studies. Participants learn to systematically identify process hazards, assess risks, and recommend controls, ensuring compliance with South African health and safety regulations.

Category	Custom Courses
Subfield	Health, Safety and Environment (HSE)
Unit Standard	AATICD-0050
Accreditation	SAQA Accredited · NQF Level 5 · 10 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply HAZOP methodology to systematically identify deviations, causes, and consequences in process systems.
- Analyze process parameters and guide words to evaluate potential hazards and operability issues.
- Evaluate risk levels using qualitative or semi-quantitative techniques and prioritize recommendations.
- Design HAZOP worksheets and document study findings in accordance with organizational and regulatory standards.
- Implement effective team facilitation techniques to ensure comprehensive and efficient HAZOP sessions.
- Demonstrate compliance with relevant South African health and safety legislation and industry best practices.

WHO SHOULD ATTEND

- Team leaders, supervisors, engineers, and safety personnel who are or will be members of HAZOP study teams in process industries such as petrochemical, chemical, pharmaceutical, and mining sectors.

COURSE OUTLINE

Day 1: Introduction to HAZOP and Process Safety

- Overview of process safety and major accident hazards
- History and evolution of HAZOP methodology
- Key HAZOP terminology (nodes, deviations, parameters, guide words)
- HAZOP study phases: preparation, examination, documentation, follow-up
- Team roles: leader, scribe, team members (process, operations, maintenance, etc.)
- Introduction to risk matrix and risk ranking

Day 2: HAZOP Methodology and Preparation

- Step-by-step HAZOP procedure: select node, describe design intent, identify deviations
- Guide words (No, More, Less, Reverse, etc.) and process parameters (flow, pressure, temperature, etc.)
- Generating meaningful deviations and brainstorming causes
- Identifying consequences and existing safeguards
- Introduction to HAZOP worksheets
- Pre-study preparation: piping and instrumentation diagrams (P&IDs), process flow diagrams (PFDs), operating procedures

Day 3: Advanced HAZOP Techniques and Team Leadership

- Leadership skills for HAZOP facilitators: keeping focus, encouraging participation, handling conflict
- Advanced deviations: combination deviations, time-dependent deviations, human factors
- Evaluating safeguard effectiveness: independence, reliability, auditability
- Developing recommendations: hierarchy of controls, action items
- Managing documentation: recording decisions, assumptions, and action tracking
- Dealing with common challenges: incomplete data, scope creep, team fatigue

Day 4: Practical HAZOP Workshop – Case Study 1

- Review of case study process: batch reactor system with P&IDs; and operating procedures
- Node selection and design intent definition
- Systematic deviation analysis using guide words and parameters
- Risk ranking using company risk matrix
- Formulating recommendations and assigning responsibilities
- Preparation of final HAZOP report

Day 5: Practical HAZOP Workshop – Case Study 2 and Integration

- Case study 2: continuous distillation column with reboiler and condenser
- Multi-node HAZOP with interlinked systems
- Linking HAZOP outcomes to layers of protection analysis (LOPA)
- Integration with safety instrumented systems (SIS) and alarm management
- Quality assurance of HAZOP studies: peer review and audit
- Course wrap-up and assessment

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **10 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 24,200.00	R 24,200.00
1	In-House	R 31,400.00	R 31,400.00
1	On-Campus (Pretoria)	R 36,200.00	R 36,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	14 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
17 Aug 2026	21 Aug 2026	On-Campus	Harare, Zimbabwe
17 Aug 2026	21 Aug 2026	On-Campus	Shenzhen, China
24 Aug 2026	28 Aug 2026	On-Campus	Bangkok, Thailand
24 Aug 2026	28 Aug 2026	On-Campus	Victoria Falls, Zimbabwe
31 Aug 2026	04 Sep 2026	On-Campus	Lusaka, Zambia
31 Aug 2026	04 Sep 2026	On-Campus	London, UK

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

- 1. Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard AATICD-0050) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
- 2. Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
- 3. Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
- 4. Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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