



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

LPG HAZOP

Custom Courses / Liquefied Petroleum Gas

Unit Standard AATICD-0369 · NQF Level 5 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to conduct Hazard and Operability (HAZOP) studies specifically for Liquefied Petroleum Gas (LPG) facilities. It covers the systematic identification of potential hazards and operability issues, enabling participants to contribute effectively to process safety management and risk mitigation in LPG operations.

Category	Custom Courses
Subfield	Liquefied Petroleum Gas
Unit Standard	AATICD-0369
Accreditation	SAQA Accredited · NQF Level 5 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply HAZOP methodology to systematically identify and analyze potential hazards and operability problems in LPG processes.
- Analyze LPG-specific properties and their implications for process safety and operability.
- Evaluate the effectiveness of existing safeguards and recommend appropriate risk reduction measures.
- Design a HAZOP study plan tailored to an LPG facility, including scope, team composition, and documentation requirements.
- Implement HAZOP recommendations and track their resolution to ensure continuous improvement in process safety.
- Demonstrate effective communication and teamwork skills during HAZOP sessions, ensuring comprehensive and accurate hazard identification.

WHO SHOULD ATTEND

- This course is designed for process engineers, safety officers, plant operators, and maintenance personnel involved in the design, operation, or management of LPG facilities.
- It is also suitable for HAZOP team members and facilitators seeking specialized knowledge in LPG applications.

COURSE OUTLINE

Day 1: Introduction to HAZOP and LPG Properties

- Overview of process safety and HAZOP history
- LPG properties: flammability, boiling point, vapour density, and explosion limits
- LPG hazards: fire, explosion, BLEVE, and toxic effects
- Legislation and standards: OHS Act, SANS 10087, and SANS 10229
- HAZOP terminology: nodes, deviations, guide words, causes, consequences, and safeguards
- HAZOP team composition and roles
- Introduction to P&IDs; and process flow diagrams
- Case study: LPG incident review

Day 2: HAZOP Methodology and Application to LPG Systems

- Detailed HAZOP procedure: preparation, node selection, and deviation analysis
- Guide words: No, More, Less, Reverse, As well as, Part of, Other than
- Parameters: Flow, Pressure, Temperature, Level, Composition, and others
- Application to LPG systems: storage tanks, vaporizers, piping, and loading/unloading
- Identifying causes and consequences specific to LPG
- Evaluating existing safeguards: engineering controls, alarms, and procedures
- Risk assessment and ranking using risk matrices
- Documentation and reporting of HAZOP results

Day 3: Advanced HAZOP Techniques and Integration

- Advanced HAZOP: human factors, procedural HAZOP, and batch processes
- LPG-specific scenarios: tank overfill, pressure relief, and emergency isolation
- HAZOP facilitation skills and managing team dynamics
- Linking HAZOP to safety case development and major hazard control
- Action tracking and close-out procedures
- Management of change and revalidation of HAZOP
- Workshop: full HAZOP simulation on an LPG plant
- Review of common pitfalls and best practices

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 **6 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 13,900.00	R 13,900.00
1	In-House	R 18,100.00	R 18,100.00
1	On-Campus (Pretoria)	R 20,800.00	R 20,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
30 Sep 2026	02 Oct 2026	In-House	—
30 Sep 2026	02 Oct 2026	On-Campus	Victoria Falls, Zimbabwe
05 Oct 2026	07 Oct 2026	On-Campus	Nairobi, Kenya
05 Oct 2026	07 Oct 2026	On-Campus	Lusaka, Zambia
06 Oct 2026	08 Oct 2026	On-Campus	Kigali, Rwanda
06 Oct 2026	08 Oct 2026	On-Campus	Windhoek, Namibia
06 Oct 2026	08 Oct 2026	On-Campus	Bangkok, Thailand
07 Oct 2026	09 Oct 2026	Online	—

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-0369) 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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