Accredited Africa Training Institute for Capacity Development
Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa
Tel: +27 12 004 8389 · Mobile: +27 65 077 6310
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COURSE BROCHURE

Energy Reliability and Maintenance

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0555 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course equips participants with the knowledge and practical skills to ensure reliable energy supply through proactive maintenance strategies. It focuses on reducing downtime, optimizing energy usage, and implementing maintenance best practices to enhance operational efficiency.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0555
Accreditation	SAQA Accredited · NQF Level 5 · 4 Credits
Duration	2 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS — verifiable online

LEARNING OUTCOMES

- Apply preventive and predictive maintenance techniques to improve energy system reliability.
- Analyze energy consumption data to identify inefficiencies and maintenance needs.
- Evaluate the impact of maintenance practices on energy reliability and operational continuity.
- Design a maintenance plan that optimizes energy performance and reduces downtime.
- Implement condition-based monitoring to detect potential failures before they occur.
- Demonstrate compliance with relevant health, safety, and environmental regulations in maintenance activities.

WHO SHOULD ATTEND

- Facilities managers, maintenance supervisors, and operations personnel responsible for energy systems and equipment reliability.

COURSE OUTLINE

Day 1: **Foundations of Energy Reliability and Maintenance**

- Introduction to energy systems and their critical components
- Overview of maintenance philosophies: reactive, preventive, predictive, and proactive
- Key reliability concepts: MTBF, MTTR, availability, and reliability
- Failure modes and effects analysis (FMEA) basics
- Reliability-centered maintenance (RCM) principles
- Energy system performance indicators and benchmarking
- Regulatory and safety considerations in energy maintenance

Day 2: **Advanced Maintenance Strategies and Practical Integration**

- Condition monitoring techniques: vibration analysis, thermography, oil analysis, and ultrasonic testing
- Root cause analysis (RCA) methodologies
- Reliability block diagrams and fault tree analysis
- Maintenance planning and scheduling optimization
- Integration of reliability practices with energy management systems (e.g., ISO 50001
- Economic analysis of maintenance strategies: life cycle costing and return on investment
- Case studies of successful reliability and maintenance programs in energy industries

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 **4 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 11,900.00	**R 11,900.00**
1	In-House	R 16,100.00	**R 16,100.00**
1	On-Campus (Pretoria)	R 17,800.00	**R 17,800.00**

UPCOMING SESSIONS

Start	End	Method	Venue
02 Dec 2026	03 Dec 2026	On-Campus	Dubai, UAE
03 Dec 2026	04 Dec 2026	On-Campus	Victoria Falls, Zimbabwe
03 Dec 2026	04 Dec 2026	On-Campus	Cape Town, South Africa
10 Dec 2026	11 Dec 2026	On-Campus	Maseru, Lesotho
10 Dec 2026	11 Dec 2026	On-Campus	Kigali, Rwanda
10 Dec 2026	11 Dec 2026	On-Campus	Accra, Ghana
10 Dec 2026	11 Dec 2026	On-Campus	Cape Town, South Africa
10 Dec 2026	11 Dec 2026	On-Campus	Abu Dhabi, UAE

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

HOW TO GET A QUOTATION OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard AATICD-0555) and click **Get A Quotation**. 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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