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

Rotating Equipment Maintenance

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0432 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course equips participants with the knowledge and practical skills to effectively maintain rotating equipment, including pumps, compressors, turbines, and motors. It focuses on preventive and predictive maintenance strategies, fault diagnosis, and safety compliance to enhance equipment reliability and operational efficiency.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0432
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 systematic procedures for the safe and effective maintenance of rotating equipment.
- Analyze common failure modes and diagnose faults in rotating equipment using vibration analysis and other diagnostic tools.
- Evaluate the condition of rotating equipment through inspection and testing to determine maintenance needs.
- Implement preventive and predictive maintenance schedules to minimize downtime and extend equipment life.
- Demonstrate compliance with relevant health, safety, and environmental regulations during maintenance activities.

WHO SHOULD ATTEND

- This course is designed for maintenance technicians, millwrights, and engineers who are responsible for the upkeep and repair of rotating equipment in industrial settings.

COURSE OUTLINE

Day 1: **Fundamentals of Rotating Equipment and Condition Monitoring**

- Introduction to rotating equipment: types, applications, and components (shafts, bearings, seals, couplings).
- Principles of operation: centrifugal and positive displacement pumps, fans, blowers, and compressors.
- Lubrication fundamentals: types of lubricants, grease vs oil, and lubrication schedules.
- Condition monitoring overview: vibration analysis, oil analysis, thermography, and performance monitoring.
- Vibration measurement: sensors, data collection, and interpretation of vibration signatures.
- Alarm limits and severity charts: ISO 10816 and other standards.
- Safety and isolation: lockout/tagout, confined space entry, and safe work practices.
- Introduction to maintenance strategies: reactive, preventive, predictive, and proactive.

Day 2: **Advanced Diagnostics, Maintenance, and Repair**

- Advanced fault diagnosis: misalignment, unbalance, bearing defects, and resonance.
- Shaft alignment: methods (straight edge, dial indicator, laser) and thermal growth compensation.
- Dynamic balancing: single-plane and two-plane balancing procedures.
- Maintenance planning and scheduling: work orders, spare parts management, and reliability-centered maintenance (RCM).
- Disassembly and inspection techniques: bearing removal, shaft inspection, and seal replacement.
- Repair and reassembly: tolerances, torquing, and clearances.
- Performance monitoring and testing: pump curves and compressor performance.
- Continuous improvement: root cause analysis (RCA) and failure mode and effects analysis (FMEA).

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
01 Dec 2026	02 Dec 2026	On-Campus	Shenzhen, China
01 Dec 2026	02 Dec 2026	On-Campus	Lagos, Nigeria
02 Dec 2026	03 Dec 2026	On-Campus	Durban, South Africa
03 Dec 2026	04 Dec 2026	On-Campus	Dubai, UAE
07 Dec 2026	08 Dec 2026	On-Campus	Maseru, Lesotho
07 Dec 2026	08 Dec 2026	On-Campus	Kigali, Rwanda
07 Dec 2026	08 Dec 2026	On-Campus	Accra, Ghana
07 Dec 2026	08 Dec 2026	On-Campus	Cape Town, South Africa

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-0432) 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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