



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

Auxiliary Equipment Operation And Systems Management Training

Services / Transport, Operations and Logistics

Unit Standard 113992 · NQF Level 3 · 10 Credits · 7 Days

COURSE OVERVIEW

This course equips learners with the skills to operate and manage auxiliary equipment in industrial and engineering environments. Participants will gain the knowledge to ensure efficient, safe, and compliant equipment systems management, aligning with South African regulatory standards.

Category	Services
Subfield	Transport, Operations and Logistics
Unit Standard	113992
Accreditation	SAQA Accredited · NQF Level 3 · 10 Credits
Duration	7 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate the ability to operate auxiliary equipment according to standard operating procedures.
- Apply principles of systems management to coordinate auxiliary equipment operations.
- Analyze equipment performance data to identify areas for improvement.
- Evaluate safety and environmental compliance in auxiliary equipment operations.
- Implement maintenance schedules and troubleshooting protocols for auxiliary systems.
- Design monitoring and reporting systems for auxiliary equipment performance.

WHO SHOULD ATTEND

- This course is designed for operators, technicians, and supervisors responsible for auxiliary equipment in manufacturing, mining, or process industries.
- It is also suitable for maintenance personnel seeking to enhance their systems management capabilities.

COURSE OUTLINE

Day 1: Introduction to Auxiliary Equipment and Systems

- Overview of auxiliary equipment: pumps, compressors, fans, conveyors, and valves
- System integration and process flow basics
- Introduction to operational documentation and standard operating procedures
- Safety regulations (OHS Act, SANS codes) and hazard identification
- Principles of energy sources: electrical, pneumatic, hydraulic

Day 2: Mechanical Systems and Components

- Pumps: centrifugal, positive displacement – types, components, and operation
- Compressors and fans: principles, performance curves, and controls
- Conveyor systems: belt, screw, and pneumatic – components and safety
- Valve types: gate, globe, ball, butterfly, check – application and maintenance
- Lubrication, bearings, and seals: selection and best practices

Day 3: Electrical and Control Systems

- Electrical safety: earthing, protection devices, and regulations
- Motors: AC/DC, starters, variable frequency drives
- Control systems: relays, contactors, timers, and programmable logic controllers (PLCs)
- Sensors: pressure, temperature, level, flow – principles and calibration
- Instrumentation diagrams (P&IDs;) and loop sheets

Day 4: Pneumatic and Hydraulic Systems

- Pneumatic systems: compressors, air treatment, valves, actuators
- Hydraulic systems: pumps, reservoirs, valves, cylinders, and motors
- Circuit diagrams: symbols, layout, and reading
- Pressure, flow, and directional control valves
- Troubleshooting common faults: leaks, pressure loss, contamination

Day 5: Operation and Monitoring of Auxiliary Systems

- Start-up and shut-down procedures for typical auxiliary systems
- Monitoring: temperature, pressure, vibration, flow, and level
- Alarm management and response protocols
- Log sheets, shift reports, and communication
- Energy efficiency and optimisation basics

Day 6: Maintenance Planning and Reliability

- Maintenance strategies: reactive, preventive, predictive, and proactive
- Condition monitoring techniques: vibration analysis, thermography, oil analysis
- Spare parts management and inventory control
- Root cause analysis and failure modes (FMEA basics)
- Maintenance planning tools: CMMS, work orders, and schedules

Day 7: Integration, Troubleshooting, and Assessment

- System-level troubleshooting: case studies and scenarios
- Communication and teamwork in multi-system operations
- Emergency response and contingency planning
- Review of key concepts and Q&A;

- Written and practical 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 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 28,200.00	R 28,200.00
1	In-House	R 36,700.00	R 36,700.00
1	On-Campus (Pretoria)	R 42,300.00	R 42,300.00

UPCOMING SESSIONS

Start	End	Method	Venue
26 Jun 2026	06 Jul 2026	On-Campus	Nairobi, Kenya
29 Jun 2026	07 Jul 2026	On-Campus	Mombasa, Kenya
30 Jun 2026	08 Jul 2026	On-Campus	Luanda, Angola
01 Jul 2026	09 Jul 2026	On-Campus	Kigali, Rwanda
01 Jul 2026	09 Jul 2026	On-Campus	Maseru, Lesotho
02 Jul 2026	10 Jul 2026	On-Campus	Nairobi, Kenya
03 Jul 2026	13 Jul 2026	On-Campus	Mbabane, Eswatini
06 Jul 2026	14 Jul 2026	On-Campus	Luanda, Angola

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 113992) 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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