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
Email: apply@aaticd.co.za · Website: www.aaticd.co.za

COURSE BROCHURE

Process Control

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0438 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to effectively monitor, control, and improve processes within an organisation. It covers the principles of process control, the use of control charts and other tools, and the application of continuous improvement methodologies to enhance efficiency and quality.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0438
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 the principles of process control to monitor and manage organisational processes.
- Analyse process data using control charts and other statistical tools to identify variations and trends.
- Evaluate process performance against established standards and identify areas for improvement.
- Design and implement corrective actions to address process deviations and improve efficiency.
- Demonstrate the use of continuous improvement methodologies, such as PDCA, to enhance process quality.

WHO SHOULD ATTEND

- This course is designed for team leaders, supervisors, process operators, quality assurance personnel, and anyone involved in managing or improving business processes.

COURSE OUTLINE

Day 1: **Fundamentals of Process Control**

- Introduction to process control: definitions and applications
- Process variables: temperature, pressure, flow, level, and composition
- Control loop components: sensors, transmitters, controllers, and actuators
- Open-loop vs. closed-loop control systems
- Feedback control principles: setpoint, error, and correction
- Feedforward control and its advantages
- Overview of control strategies: ON/OFF, PID, and advanced methods
- Safety and regulatory considerations in process control

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

- PID controller fundamentals: proportional, integral, and derivative actions
- Controller tuning methods: trial-and-error, Ziegler-Nichols, and software tools
- Advanced control strategies: cascade, ratio, feedforward, and override
- Process dynamics: dead time, lag, and stability
- Troubleshooting control loops: diagnostics and corrective actions
- Human-machine interface (HMI) and SCADA systems
- Case studies: process control in chemical, mining, and manufacturing industries
- Best practices for maintaining and optimizing control systems

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	Dubai, UAE
02 Dec 2026	03 Dec 2026	On-Campus	Victoria Falls, Zimbabwe
02 Dec 2026	03 Dec 2026	On-Campus	Cape Town, South Africa
03 Dec 2026	04 Dec 2026	On-Campus	Shenzhen, China
03 Dec 2026	04 Dec 2026	On-Campus	Lagos, Nigeria
09 Dec 2026	10 Dec 2026	On-Campus	Maseru, Lesotho
09 Dec 2026	10 Dec 2026	On-Campus	Kigali, Rwanda
09 Dec 2026	10 Dec 2026	On-Campus	Accra, Ghana

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-0438) 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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