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

Produced Water Treatment

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0389 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to manage produced water treatment processes effectively, ensuring compliance with environmental regulations and operational efficiency. It covers the principles, technologies, and best practices for treating water produced during oil and gas extraction, with a focus on safety and sustainability.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0389
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 fundamental principles of produced water treatment to identify and select appropriate treatment methods.
- Analyze the physical, chemical, and biological characteristics of produced water to determine treatment requirements.
- Evaluate the performance of different treatment technologies, including oil-water separation, filtration, and biological treatment.
- Design a treatment process flow diagram for a typical produced water system, considering operational constraints and regulatory limits.
- Implement monitoring and control procedures to ensure treated water quality meets discharge or reuse standards.
- Demonstrate compliance with relevant South African environmental legislation and industry standards in produced water management.

WHO SHOULD ATTEND

- This course is designed for process operators, field technicians, and supervisors in the oil and gas industry, as well as environmental and safety professionals involved in water management.

COURSE OUTLINE

Day 1: **Fundamentals of Produced Water and Treatment Principles**

- Introduction to produced water: definition, sources, and volumes.
- Characterization of produced water: physical, chemical, and biological properties.
- Environmental and regulatory considerations (South African legislation, SANS/ISO standards).
- Overview of treatment train: primary (oil/water separation), secondary (flotation, filtration), tertiary (polishing).
- Physical treatment processes: gravity separation, hydrocyclones, filtration.
- Chemical treatment processes: coagulation, flocculation, scale and corrosion control.
- Biological treatment basics: aerobic and anaerobic processes.
- Safety and environmental management in produced water handling.

Day 2: **Advanced Treatment Technologies and System Optimization**

- Advanced separation technologies: membranes, dissolved air flotation (DAF), induced gas flotation (IGF).
- Biological treatment systems: MBBR, MBR, and constructed wetlands.
- Chemical treatment optimization: polymer selection, dosing, and control.
- Water reuse applications: irrigation, injection, and industrial use.
- Disposal options: deep well injection, evaporation ponds, and zero liquid discharge.
- Monitoring and control: key parameters, sampling, and analytical methods.
- Troubleshooting common operational issues.
- Case studies and best practices in the South African context.

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	Victoria Falls, Zimbabwe
01 Dec 2026	02 Dec 2026	On-Campus	Cape Town, South Africa
02 Dec 2026	03 Dec 2026	On-Campus	Shenzhen, China
02 Dec 2026	03 Dec 2026	On-Campus	Lagos, Nigeria
03 Dec 2026	04 Dec 2026	On-Campus	Durban, South Africa
08 Dec 2026	09 Dec 2026	On-Campus	Maseru, Lesotho
08 Dec 2026	09 Dec 2026	On-Campus	Kigali, Rwanda
08 Dec 2026	09 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-0389) 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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