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

Reservoir Engineering

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0399 · NQF Level 5 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the fundamental principles and practical skills of reservoir engineering, enabling them to analyze reservoir performance, estimate reserves, and contribute to field development planning. Participants will gain the knowledge to make informed decisions regarding reservoir management and optimization.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0399
Accreditation	SAQA Accredited · NQF Level 5 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS — verifiable online

LEARNING OUTCOMES

- Apply reservoir engineering principles to characterize reservoir rock and fluid properties.
- Analyze reservoir performance using material balance and decline curve analysis techniques.
- Evaluate reservoir development strategies and recovery mechanisms.
- Design basic well tests and interpret their results to assess reservoir parameters.
- Implement reservoir management practices to optimize hydrocarbon recovery.
- Demonstrate proficiency in using industry-standard software for reservoir simulation and modeling.

WHO SHOULD ATTEND

- This course is designed for petroleum engineers, geoscientists, production technologists, and technical staff seeking to enhance their understanding of reservoir engineering principles.
- It is also suitable for professionals transitioning into reservoir engineering roles or those requiring a comprehensive overview of the discipline.

COURSE OUTLINE

Day 1: **Fundamentals of Reservoir Engineering**

- Introduction to reservoir engineering and its objectives
- Reservoir rock properties: porosity, permeability, saturation
- Fluid properties: PVT behaviour, viscosity, formation volume factors
- Reservoir drive mechanisms: depletion, water drive, gas cap drive
- Darcy's law and fluid flow fundamentals
- Volumetric estimation of hydrocarbons in place
- Introduction to reservoir data sources (core, well logs, pressure tests

Day 2: **Reservoir Performance and Well Testing**

- Principles of well testing: buildup, drawdown, and interference tests
- Interpretation of pressure transient data (Horner plots, type curves
- Material balance equation for oil and gas reservoirs
- Water influx models (steady-state, unsteady-state
- Inflow Performance Relationship (IPR) and Productivity Index (PI
- Decline curve analysis and production forecasting
- Reservoir heterogeneities and their impact on performance

Day 3: **Advanced Reservoir Engineering and Field Development**

- Reservoir simulation: model construction, history matching, and prediction
- Enhanced Oil Recovery (EOR): thermal, chemical, miscible, and immiscible methods
- Uncertainty and risk analysis in reservoir engineering
- Field development planning: primary, secondary, and tertiary recovery
- Reservoir management and surveillance
- Economics of reservoir engineering projects (NPV, IRR
- Case studies of integrated reservoir studies

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 **6 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 13,900.00	**R 13,900.00**
1	In-House	R 18,700.00	**R 18,700.00**
1	On-Campus (Pretoria)	R 20,800.00	**R 20,800.00**

UPCOMING SESSIONS

Start	End	Method	Venue
01 Dec 2026	03 Dec 2026	On-Campus	Shenzhen, China
01 Dec 2026	03 Dec 2026	On-Campus	Cape Town, South Africa
02 Dec 2026	04 Dec 2026	On-Campus	Durban, South Africa
02 Dec 2026	04 Dec 2026	On-Campus	Lagos, Nigeria
07 Dec 2026	09 Dec 2026	On-Campus	Maseru, Lesotho
07 Dec 2026	09 Dec 2026	On-Campus	Kigali, Rwanda
07 Dec 2026	09 Dec 2026	On-Campus	Accra, Ghana
07 Dec 2026	09 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-0399) 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.

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 · WhatsApp: +27 65 077 6310 · apply@aaticd.co.za · www.aaticd.co.za