



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

Biogas Technology

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0490 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course provides participants with a comprehensive understanding of biogas technology, including its principles, production processes, and applications. It equips learners with the skills to assess, implement, and manage biogas systems in various contexts, contributing to sustainable energy solutions and environmental conservation.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0490
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 biogas technology to evaluate feedstock suitability and process conditions.
- Analyze the biological and chemical processes involved in biogas production to optimize yield and quality.
- Evaluate the economic, environmental, and social benefits of biogas systems in different settings.
- Design a basic biogas plant layout, selecting appropriate components and safety measures.
- Implement operational procedures for biogas plant start-up, monitoring, and maintenance.
- Demonstrate compliance with relevant South African regulations and standards for biogas systems.

WHO SHOULD ATTEND

- This course is ideal for engineers, technicians, project managers, environmentalists, and entrepreneurs interested in renewable energy and sustainable waste management solutions.

COURSE OUTLINE

Day 1: Introduction to Biogas Technology

- Overview of biogas: history, global and local context
- Anaerobic digestion process: microbiology and biochemistry
- Feedstock types and characteristics
- Biogas system components: digester, gas collection, storage, and utilisation
- Factors affecting biogas production: temperature, pH, loading rate, retention time
- Uses of biogas: cooking, lighting, electricity generation, and vehicle fuel
- Environmental and economic benefits
- South African standards and regulations

Day 2: Design, Operation, and Maintenance of Biogas Systems

- Design calculations: sizing the digester, gas holder, and piping
- Site selection and construction materials
- Commissioning and start-up procedures
- Daily operation: feeding, mixing, and monitoring
- Safety procedures: gas leaks, pressure management, and confined spaces
- Troubleshooting: low gas yield, souring, and blockages
- Maintenance schedules and record keeping
- Cost-benefit analysis and funding options

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 15,400.00	R 15,400.00
1	On-Campus (Pretoria)	R 17,800.00	R 17,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
30 Sep 2026	01 Oct 2026	On-Campus	Maseru, Lesotho
30 Sep 2026	01 Oct 2026	On-Campus	Victoria Falls, Zimbabwe
01 Oct 2026	02 Oct 2026	In-House	—
01 Oct 2026	02 Oct 2026	On-Campus	Shenzhen, China
05 Oct 2026	06 Oct 2026	On-Campus	Nairobi, Kenya
05 Oct 2026	06 Oct 2026	On-Campus	Bangkok, Thailand
06 Oct 2026	07 Oct 2026	On-Campus	Windhoek, Namibia
07 Oct 2026	08 Oct 2026	Online	—

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 AATICD-0490) 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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