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

Grid Energy Storage

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0496 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to design, implement, and manage grid energy storage systems. It covers the fundamentals of energy storage technologies, grid integration, safety protocols, and performance monitoring, enabling participants to contribute to the effective and sustainable operation of modern energy grids.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0496
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 principles of grid energy storage to select appropriate technologies for specific applications.
- Analyze grid requirements and design energy storage solutions that enhance grid stability and efficiency.
- Evaluate the performance and safety of grid energy storage systems using relevant standards and best practices.
- Implement monitoring and control strategies for grid-integrated energy storage.
- Demonstrate compliance with South African regulations and industry codes related to grid energy storage.
- Design maintenance and troubleshooting procedures for grid energy storage systems.

WHO SHOULD ATTEND

- This course is designed for engineers, technicians, project managers, and energy professionals involved in the planning, installation, or maintenance of grid-connected energy storage systems.

COURSE OUTLINE

Day 1: **Fundamentals of Grid Energy Storage**

- Introduction to grid energy storage and its benefits
- Overview of storage technologies: batteries, pumped hydro, flywheels, supercapacitors
- Key parameters: energy capacity, power rating, round-trip efficiency, cycle life
- Grid services: frequency regulation, peak shaving, renewable integration
- South African regulatory context: NERSA, Grid Code requirements
- Safety considerations and standards (e.g., SANS, IEC

Day 2: **Integration, Applications, and Case Studies**

- Storage system components: BMS, PCS, and integration with grid infrastructure
- Sizing methodologies for peak shaving and renewable firming
- Economic analysis: cost-benefit, revenue streams, and financing models
- Operational considerations: charge/discharge strategies, degradation management
- Case studies: South African projects (e.g., Eskom's battery storage
- Future trends: second-life batteries, solid-state, and grid-scale hydrogen

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	Shenzhen, China
01 Dec 2026	02 Dec 2026	On-Campus	Lagos, Nigeria
02 Dec 2026	03 Dec 2026	On-Campus	Durban, South Africa
03 Dec 2026	04 Dec 2026	On-Campus	Dubai, UAE
07 Dec 2026	08 Dec 2026	On-Campus	Maseru, Lesotho
07 Dec 2026	08 Dec 2026	On-Campus	Kigali, Rwanda
07 Dec 2026	08 Dec 2026	On-Campus	Accra, Ghana
07 Dec 2026	08 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-0496) 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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