



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

Electric Mobility

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0547 · NQF Level 5 · 4 Credits · 2 Days

COURSE OVERVIEW

This course provides participants with a comprehensive understanding of electric mobility, including the technology, infrastructure, and business models that drive the transition to electric vehicles (EVs). Participants will explore the environmental, economic, and regulatory drivers of EV adoption, and learn to evaluate and implement electric mobility solutions in their organizations.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0547
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

- Analyze the key components and operation of electric vehicles, including battery technology, charging systems, and powertrain architectures.
- Evaluate the environmental, economic, and social impacts of electric mobility, including lifecycle assessments and total cost of ownership.
- Design strategies for integrating electric vehicles into existing fleets, considering infrastructure requirements, operational efficiency, and maintenance.
- Implement charging infrastructure projects, including site selection, grid integration, and management systems.
- Demonstrate knowledge of relevant regulations, standards, and incentives that affect electric mobility in South Africa.
- Develop a business case for electric mobility adoption, including financial analysis and risk assessment.

WHO SHOULD ATTEND

- This course is designed for professionals in the automotive, energy, transportation, and logistics sectors, as well as policy makers, fleet managers, and sustainability officers who need to understand and respond to the shift towards electric mobility.

COURSE OUTLINE

Day 1: Foundations of Electric Mobility

- Introduction to electric mobility: history, benefits, and challenges
- EV architecture: battery, motor, power electronics, and control systems
- Types of EVs: BEV, PHEV, HEV, and FCEV
- Battery technology: lithium-ion, solid-state, and emerging chemistries
- Charging infrastructure: AC and DC charging, standards, and connectors
- Environmental impact and lifecycle analysis of EVs
- South African context: policy, incentives, and market adoption

Day 2: EV Systems, Charging, and Integration

- In-depth study of EV powertrain components and their interactions
- Battery management systems (BMS) and thermal management
- Charging protocols: CHAdeMO, CCS, and Tesla Supercharger
- Smart charging, V2G (vehicle-to-grid), and grid stability
- Maintenance of EVs: high-voltage safety, diagnostics, and service
- Fleet electrification: planning, cost analysis, and implementation
- Case studies of EV projects in South Africa and globally

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
01 Oct 2026	02 Oct 2026	On-Campus	Maseru, Lesotho
01 Oct 2026	02 Oct 2026	On-Campus	Victoria Falls, Zimbabwe
05 Oct 2026	06 Oct 2026	On-Campus	Mbabane, Eswatini
05 Oct 2026	06 Oct 2026	On-Campus	Lusaka, Zambia
06 Oct 2026	07 Oct 2026	On-Campus	Nairobi, Kenya
06 Oct 2026	07 Oct 2026	On-Campus	Bangkok, Thailand
07 Oct 2026	08 Oct 2026	On-Campus	Windhoek, Namibia
08 Oct 2026	09 Oct 2026	On-Campus	Kigali, Rwanda

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-0547) 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.

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