



## 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

# Electric Fence Installation

Law, Military Science and Security / Safety in Society

Unit Standard 244329 · NQF Level 4 · 11 Credits · 8 Days

## COURSE OVERVIEW

This course equips learners with the skills and knowledge to install electric fencing systems in compliance with South African standards and regulations. Participants will understand the principles of electric fencing, safety protocols, and installation techniques to ensure effective and secure perimeter protection.

|                 |                                            |
|-----------------|--------------------------------------------|
| Category        | Law, Military Science and Security         |
| Subfield        | Safety in Society                          |
| Unit Standard   | 244329                                     |
| Accreditation   | SAQA Accredited · NQF Level 4 · 11 Credits |
| Duration        | 8 days                                     |
| Training Method | Online, On-Campus, In-House                |
| Certificate     | Issued via AATICD LMS – verifiable online  |

## LEARNING OUTCOMES

- Apply relevant legislation, standards, and safety regulations governing electric fence installation in South Africa.
- Plan and prepare for electric fence installation, including site assessment and material selection.
- Install electric fence components such as energizers, conductors, and earthing systems according to specifications.
- Test and commission electric fence systems to ensure functionality and compliance.
- Demonstrate proper maintenance and fault-finding procedures for electric fences.
- Implement safety measures to prevent electrical hazards and ensure user safety.

## WHO SHOULD ATTEND

- This course is designed for security installers, electricians, and technicians who wish to specialize in electric fence installation.
- It is also suitable for individuals seeking to enter the security industry or enhance their technical skills.

## COURSE OUTLINE

### Day 1: Introduction to Electric Fencing and Safety

- What is an electric fence?
- History and applications
- Legal requirements (SANS 10222, OHSA)
- Safety precautions and PPE
- Basic electrical theory (voltage, current, resistance)
- Components overview: energizer, conductors, insulators, earth system
- Types of electric fences (security, agricultural, wildlife)
- Standards and regulations in South Africa

### Day 2: Energizers and Power Supply

- Types of energizers (mains, battery, solar)
- Energizer ratings and selection criteria
- Installation of mains-powered energizers
- Battery and solar energizer installation
- Earthing and surge protection
- Connecting energizer to fence line
- Testing energizer output
- Common faults and diagnostics

### Day 3: Conductors and Fence Line Construction

- Types of conductors (steel wire, polywire, tape, netting)
- Conductor selection based on application
- Tensioning techniques and tools
- Joining methods (connectors, knots, crimps)
- Corner posts and strainers
- Line posts and droppers
- Spacing and height requirements
- Vegetation management along fence line

### Day 4: Insulators, Posts, and Hardware

- Types of insulators (pin, strain, stay, offset)
- Insulator materials (porcelain, plastic, rubber)
- Installing insulators on wood, steel, and concrete posts
- Post types and installation (driven, dug, concrete)
- Gate hardware and insulated gate handles
- Corner and end assemblies
- Cable ties, brackets, and accessories
- Maintenance of insulators

### Day 5: Earthing Systems and Surge Protection

- Principles of earthing
- Earth rod installation (length, depth, spacing)
- Soil resistivity and multiple rods
- Connecting earth system to energizer
- Surge protection (lightning and power surges)

- Installing surge arrestors
- Testing earth resistance with a meter
- Common earthing problems and solutions

#### Day 6: Fence Energizer and System Testing

- Using a digital voltmeter and fence tester
- Measuring voltage at various points
- Measuring current (leakage)
- Interpreting readings (voltage drop, pulse shape)
- Fault finding (short circuits, open circuits, vegetation)
- Adjusting energizer pulse rate and power
- Recording test data
- Reporting and documentation

#### Day 7: Gates, Signage, and Compliance

- Gate types and electrification options
- Insulated gate handles and underground cables
- Warning sign requirements (size, placement, wording)
- Compliance checklist (SANS 10222)
- Regulatory bodies and inspections
- Liability and risk management
- Customer handover documentation
- Maintenance schedules and records

#### Day 8: Advanced Applications and Course Review

- Security fences (perimeter, anti-climb)
- Agricultural fences (cattle, game, predator)
- Temporary and portable fences
- Integration with alarm systems and CCTV
- Remote monitoring and control
- Case studies and problem solving
- Course review and Q&A;
- Final written and practical assessment

## 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 **11 NQF credits** at **NQF Level 4**.

## PRICING (PER DELEGATE, EX-VAT)

| Delegates | Training Method      | Price per Delegate | Total       |
|-----------|----------------------|--------------------|-------------|
| 1         | Online               | R 30,700.00        | R 30,700.00 |
| 1         | In-House             | R 39,900.00        | R 39,900.00 |
| 1         | On-Campus (Pretoria) | R 46,000.00        | R 46,000.00 |

## UPCOMING SESSIONS

| Start       | End         | Method    | Venue                   |
|-------------|-------------|-----------|-------------------------|
| 10 Aug 2026 | 19 Aug 2026 | On-Campus | Dubai, UAE              |
| 11 Aug 2026 | 20 Aug 2026 | On-Campus | Durban, South Africa    |
| 12 Aug 2026 | 21 Aug 2026 | On-Campus | Pretoria, South Africa  |
| 12 Aug 2026 | 21 Aug 2026 | On-Campus | Mauritius               |
| 14 Aug 2026 | 25 Aug 2026 | On-Campus | Abu Dhabi, UAE          |
| 14 Aug 2026 | 25 Aug 2026 | On-Campus | Cape Town, South Africa |
| 17 Aug 2026 | 26 Aug 2026 | On-Campus | Shenzhen, China         |
| 17 Aug 2026 | 26 Aug 2026 | On-Campus | Pretoria, South Africa  |

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](http://www.aaticd.co.za), open the page for this course (Unit Standard 244329) 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](mailto: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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