INDEPENDENT TRAINING MANAGEMENT

SANS 10142-1:2026 (Edition 3.3): Understanding and Complying with the Latest Wiring Code Requirements

OVERVIEW

The publication of SANS 10142-1:2026 (Edition 3.3) represents one of the most significant developments in South Africa's Wiring Code in recent years. Far more than a routine amendment, Edition 3.3 introduces fundamental changes that reflect the rapid growth of solar photovoltaic (PV) systems, battery energy storage, electric vehicle charging infrastructure, direct current (DC) installations, and Small-Scale Embedded Generation (SSEG).

For the first time, dedicated standards have been introduced for grid-connected embedded generation and medical electrical installations, while new verification procedures, specialised test reports and expanded compliance obligations redefine how modern electrical installations must be designed, installed, tested and certified.

Electrical professionals who continue to rely solely on previous editions of the Wiring Code risk overlooking important technical and compliance requirements that now form part of South African electrical installation practice.

This intensive two-day training programme provides a comprehensive understanding of every significant amendment introduced in Edition 3.3, explaining not only what has changed, but also why the changes were introduced, how they affect electrical installations, and how to ensure full compliance during design, installation, testing and certification.

BENEFITS OF ATTENDING

By attending this course, delegates will gain the knowledge and practical insight to:

- Understand all major amendments introduced in **SANS 10142-1 Edition 3.3**
- Interpret the new structure of the Wiring Code and the introduction of additional Parts
- Apply the latest requirements for Solar PV, Battery Energy Storage Systems (BESS) and Small-Scale Embedded Generation (SSEG)
- Design and verify DC electrical installations up to **1 500 V DC**
- Understand new documentation, verification and certification requirements
- Complete the new PV/Battery Generating Plant (GP) Test Report correctly
- Apply updated requirements for surge protection, arc fault detection devices and electric vehicle charging installations
- Understand the legal responsibilities of installers, registered persons, users and property owners
- Minimise compliance risks when issuing Certificates of Compliance (CoCs)
- Successfully transition from Edition 3.2 to Edition 3.3 with confidence

WHO SHOULD ATTEND?

- Electrical Engineers/Technicians/Technologists
- Electrical reticulation Supervisors/Technicians,
- Distribution system planners,
- Maintenance managers,
- Building planners/managers.
- Electrical workers

SANS 10142-1:2026 (Edition 3.3): Understanding and Complying with the Latest Wiring Code Requirements

Understanding the New Structure of SANS 10142

- Evolution of the Wiring Code
- Introduction of Parts 1-1 and 1-2
- How the new structure affects compliance
- Scope of each document
- Selecting the correct standard for different installation types

Understanding Amendment 3

- Overview of all amendments
- Updated installation requirements
- Revised special installation requirements
- Updated verification procedures
- New certification documentation
- Amendment history and legislative context

Expanded Scope for Modern Electrical Installations

- New DC voltage limits
- High-voltage DC installations
- Extra-low voltage requirements
- Modern battery systems
- Direct current safety considerations
- Practical design implications

Updated Standards and Normative References

Understanding the new standards incorporated into Edition 3.3, including:

- Solar photovoltaic installations
- Battery energy storage systems
- Utility-interconnected inverters
- Electrical insulation coordination
- Surge protection
- Medical electrical installations
- Special locations

Fundamental Electrical Installation Requirements

- Supply characteristics
- Voltage limits
- Environmental conditions
- Electrical load assessment
- Maximum demand calculations
- Installation planning

Protection Against Electric Shock

- Basic protection
- Fault protection
- Protective measures
- SELV
- PELV

Earthing and Bonding

- TN systems
- TT systems
- IT systems
- Earth continuity
- Supplementary bonding
- Earth electrode requirements
- Earth resistance testing

Cable Selection and Installation

- Current carrying capacity
- Voltage drop
- Correction factors
- Grouping factors
- Ambient temperatures
- Installation methods
- Identification requirements

Distribution Boards and Switchgear

- DB design
- Isolation requirements
- Labelling
- Accessibility
- Busbars
- Enclosures
- Main switches
- Protective equipment
- Spare capacity

Installation Requirements

Latest requirements for:

- Electric Vehicle (EV) charging installations
- Surge Protective Devices (SPDs)
- Arc Fault Detection Devices (AFDDs)
- Distribution boards
- Protection systems
- Updated equipment standards

Solar PV, Battery Systems and Embedded Generation

A comprehensive practical module covering:

- Small Scale Embedded Generation (SSEG)
- Grid-connected PV systems
- Battery storage installations
- Generating Plant (GP) documentation
- Commissioning requirements
- New Annex S Test Report
- Practical compliance requirements

Inspection, Testing and Certification

- Updated verification procedures
- Certificates of Compliance
- Inspection requirements

SANS 10142-1:2026 (Edition 3.3): Understanding and Complying with the Latest Wiring Code Requirements

Live online training | 10 – 11 September 2026 | **R 8 999 per delegate**

Booking Contact (Approving Official) Mr/Mrs/Ms

Full Names: _____

Company name: _____

Direct Tel No: _____ E-mail: _____ Fax: _____

VAT No: _____

Address: _____

Signature_____

Person Responsible for Finance: _____**Direct Tel No:** _____ **Date of Payment:**_____

BANKING DETAILS:

Independent Training Management Pty Ltd
Bank: FNB South Africa
Account Number: 62685879276
Branch Code: 251650
Branch: Randburg

THE FOLLOWING HEREBY CONFIRM ATTENDANCE TO THE WORKSHOP

Delegate1: Names_____

Position: _____ E-Mail: _____

Delegate 2: Names _____

Position: _____E-Mail: _____

Delegate 3: Names _____

Position: _____ E-Mail: _____

Delegate 4: Names _____

Position: _____ E-Mail: _____

Delegate 5: Names _____

Position: _____ E-Mail: _____

Terms & Conditions of Registration

- **Payment:** Registration is confirmed only upon receipt of full payment, proof of payment, or an official purchase order before the event start date. Certificates and CPD points may be withheld if payment is outstanding.
- **Cancellations & Substitutions:** Written cancellations must be received at least **10 working days** before the event to qualify for consideration. No refunds apply for late cancellations or non-attendance. Delegate substitutions are allowed at no extra cost with prior written notice.
- **No-Shows:** Delegates who do not attend without proper written cancellation remain liable for **100% of the invoiced fee**. No refunds or credits will be issued.
- **Programme Changes:** Independent Training Management reserves the right to change event dates, venues, content, or speakers where necessary. In cases of force majeure, events may be postponed or rescheduled without liability for additional costs.
- **Fees & VAT:** All fees are exclusive of VAT unless stated otherwise. Early-bird and discounted rates apply only when payment is received by the specified deadlines.
- **Liability:** Attendance is at the delegate's own risk. Independent Training Management is not liable for any loss or damage except where caused by gross negligence or wilful misconduct.
- **Legal Jurisdiction:** These Terms & Conditions are governed by the laws of the **Republic of South Africa**.
- **Acceptance:** Submission of this registration form constitutes acceptance of the full Terms & Conditions, as published on the Independent Training Management website