



sanedi

South African National Energy
Development Institute.



SMART METERING APPLICATION TRAINING

Foundation concepts | Practical Implementation | Optimisation Strategies

19 September 2023

Physical Attendance: Gauteng (Venue TBC)
Virtual Attendance: Training link will be provided
to registered candidates

REGISTER HERE

For queries or more information please contact:
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Closing date:
Wednesday, 13 September 2023

a collaboration with



ENERGY INNOVATION FOR LIFE

Smart metering is an advanced technology that enables the measurement of resource consumption - such as electricity, gas, or water - in real-time and allows two-way communication with the meter.

Smart meters differ from traditional meters by providing detailed information on resource usage. This allows both consumers and utility companies to make more informed decisions regarding consumption, control, and its impact on billing.

The Smart Metering Application Training (SMAT) is developed in South Africa by South Africans to provide a platform for attendees to understand the essential skills to effectively utilise smart meter data for energy management, identify opportunities for optimisation, and ensure the accuracy and reliability of smart metering systems. The expected outcomes for attendees are practically applicable and valuable for their roles in the smart metering domain.

ISO (International Organization for Standardization) has developed several standards related to smart metering to ensure interoperability, data exchange, and security in smart metering systems. These standards play a crucial role in the development, deployment, and maintenance of smart metering infrastructure. The SMAT course will cover an overview of these standards to provide secure and efficient smart metering services to consumers while maintaining data integrity and privacy.

Target Participants

Energy engineers, energy managers, facilities managers, operational staff at facilities, utility managers, utility bill verifiers, municipal engineers, green building specialists, electricians, solar installers.

Benefits of Smart Metering

- Gain valuable insights from smart meter data,
- Identifying consumption patterns and peak demand periods
Implement effective load management and resource planning
- Detecting anomalies and unusual energy usage
- Timely identification of meter errors, system malfunctions, or potential energy theft
- Accurate billing and efficient energy management

Course Outcomes

Expected outcome for attendees are practically applicable and valuable for their roles in the smart metering domain. By the end of the training, participants should be able to:

- Read and interpret smart meter data
- Audit and verify smart meters
- Make investment recommendations in recommended software for smart meter data readings
- Knowledge in smart meter data storage, administration and management
- Reading real-time electricity usage

Training Programme Outline

- Fundamentals of smart metering
- Smart metering ISO Standards
- Health and safety protocols of smart metering
- Detection of smart metering errors
- Maintenance of smart meters
- Smart meter auditing and verification
- Smart meter data management
- Analysis of meter data
- Optimisation strategies
- Integration of smart meters to the head end system
- Interoperability between various smart meters

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Trainer: Jens Stratenwerth

Msc. IT, Dip. Datametrics, Nat. Dip. Elect., Red Seal Electrician

Jens Stratenwerth is an experienced Metering Specialist with over 25 years of expertise in metering and management.

He has extensive knowledge in implementing remote metering solutions, including meter commissioning, audits, and verification. Additionally, he has developed smartcard products and metering solutions.

Jens consults internationally on designing and implementing metering solutions for international applications. He advises on preferred solutions and technical specifications of hardware, drafts and evaluates tenders, evaluates hardware, and oversees effective training and implementation.

Jens's knowledge encompasses software support for all metering products, commissioning system installations, writing specifications and technical criteria for products, and developing a business and marketing plan for the South African Bureau of Standards.

Course duration

1 day of virtual or in-class training

Accreditation

1 AEE Renewal Credits
1 ECSA CPD Credit - Pending