Consulting and Training | Reach New Heights

Course Name

Advanced Metering Infrastructure (AMI) in Smart Grid

Sector Name

Electrical Engineering

Document Type

Generated by Boostlab

Click Here To Visit Course

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Introduction

The deployment of Advanced Electricity Metering throughout the world will result in vast opportunities for professionals with an appreciation of Smart Metering Technology. Advanced Metering Infrastructure (AMI) is an integrated System of Smart Meters, Communications Networks, and Data Management Systems that enables two-way communication between Utilities and Customers. Customer Systems include in-home displays, home area Networks, Energy Management Systems, and other Customer-Side-of-the-meter equipment that enable Smart Grid Functions in Residential, Commercial, and Industrial facilities.

Electricity Metering

The roll-out of Next Generation Advanced Electricity Metering will facilitate the recording of electricity usage, and a pattern of Electricity Consumption can then be developed. This data can assist customers in reducing their energy usage and costs. Smart Meters will be beneficial to both electricity supply companies and energy consumers as they facilitate

✓ Remote Operation
✓ Remote Meter Reading

✓ Real Time Pricing

✓ New Tariff Options

The correct Exchange of Electric Meter Data is of major importance to the success of Smart Metering Implementation. The operation of the liberalized energy market will afford the opportunity for service providers to add value for customers and bring a lot of benefits for Service Providers.

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To Visit Course

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Target Audience

- ✓ Power system protection engineers
- ✓ System planners
- ✓ Technical staff responsible for Smart Grid integration into power system monitoring and control

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To Visit Course

BOOST

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Learning Objectives

- ✓ Gain an understanding of the various elements involved in Smart Metering Technology
- ✓ Understand the importance of Accurate Electrical Metering Technology
- ✓ Gain an appreciation of the different Types of Electricity Tariffs
- ✓ Gain a clear understanding of different types of Electrical Metering Instruments
- ✓ Be aware of what technologies can be employed to increase Energy Efficiency in Buildings.
- ✓ Understand the roadmap for the future rollout of the Smart Grid
- ✓ Gain an insight into Smart Metering Devices and Principles of Operation
- ✓ Appreciate the role of BMS and SCADA systems in Advanced Metering Applications.

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To Visit Course

BOOST

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Outline

✓ DAY 01

Module (01) Traditional Metering Technology

- ✓ Definition of Metering Terminology
- ✓ Components of Standard Electrical Metering Systems
- ✓ Types of Meters and Electricity Measurements
- ✓ Overview of Electrical Networks
- ✓ Automatic Meter Reading (AMR) systems

Module (02) Electrical Metering Schemes

- ✓ Industrial Metering Systems Architecture
- ✓ Typical Substation Layout
- ✓ Principles of Substation Electrical Metering Design
- ✓ Substation Automation Interfaces to IEC61850
- ✓ ION Energy Monitoring System
- ✓ Switchboard Power Metering Combinations

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Outline

✓ Day 02

Module (03) Advanced Metering Infrastructure (AMI)

- ✓ Overview of AMI
- ✓ AMI System Architecture
- ✓ AMI Market Players
- ✓ Typical AMI Programme Roll-out
- ✓ Benefits of AMI Programmes
- ✓ AMI Standards and Regulations
- ✓ Advanced Electrical Sub-metering Systems

Module (04) Metering Tariff Structures & Pricing

- ✓ Electricity Tariff Structures
- ✓ Electricity Customer Behavior Trials
- ✓ Technology Trials and Pre-payment Systems
- ✓ Dynamic Pricing Strategies for AMI
- ✓ Top 10 myths of Dynamic Pricing

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Outline

✓ Day 03

Module (05) Customer Reaction to Advanced Metering

- ✓ Smart Meter Design Principles
- ✓ Real-Time Energy Displays for Advanced Metering
- ✓ AMI – Customer Concerns and Anxieties
- ✓ Advanced Metering Cyber Security Issues
- ✓ Smart Metering and Electric Vehicles (EV)
- ✓ Billing Administrators & Customer Service Rep (CSR)
- ✓ Software Applications focusing on CSR

Module (06) Demand Side Management (DSM)

- ✓ DSM Strategies
- ✓ Setting of DSM Targets
- ✓ Funding the DSM Program
- ✓ DSM Program Execution
- ✓ DSM Regulatory Incentives
- ✓ Measurement and Verification Protocols

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Outline

✓ Day 04

Module (07) Winter/Summer Peak Demand Metering

- ✓ Reasons for Peak Load Reduction
- ✓ Structure of Peak Load Reduction Scheme
- ✓ Reliability Payments to Customers
- ✓ Energy Payments to Customers
- ✓ Power System Infrastructure for Peak Demand Metering

Module (08) Electrical Grid Modernization Strategies

- ✓ Modern Grid Strategy Defined
- ✓ The case for Grid Modernization
- ✓ Benefits of Electricity Grid Upgrading
- ✓ Pathway to a Modern Grid
- ✓ Current Developments on Grid Modernization
- ✓ Standards, Interoperability, & Cybersecurity

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Course Outline

✓ Day 05

Module (09) Smart Electricity Grids

- ✓ Smart Grid align with Technology
- ✓ Switching to Smart Grid Technologies
- ✓ Objectives of Smart Grid Roll-out
- ✓ Smart Grid Economics
- ✓ Smart Grid Road Maps
- ✓ Challenges to meeting Smart Grid Goals
- ✓ Smart Grid Demonstration Program

Module (10) BMS and SCADA Systems

- ✓ Introduction to BMS and SCADA
- ✓ SCADA and BMS System Architecture
- ✓ Typical BMS Electrical Metering Application
- ✓ Smart Home Metering Systems

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

BOOST
Consulting and Training | Reach New Heights

Advanced Metering Infrastructure (AMI) in Smart Grid

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 5, 2027	April 9, 2027	5 days	4250.00 $	UAE , Abu Dhabi
Aug. 16, 2027	Aug. 20, 2027	5 days	4950.00 $	Austria , Vienna
Dec. 13, 2026	Dec. 17, 2026	5 days	4250.00 $	KSA , Jeddah
May 24, 2027	May 28, 2027	5 days	4250.00 $	UAE , Dubai

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

Click Here To vist Course

info@boostuae.com info@boostorg.com