Consulting and Training | Reach New Heights

Course Name

Power System Operation, Monitoring & Control (Hands-On Training)

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Introduction

This course considers the issues associated with the three main topics of (a) Real-time control, (b) Online Monitoring, and (c) Short, medium, and long-term power system operation. The focus will be on the functions and then the corresponding applications in each topic. The emphasis will be on those functions and applications in modern control centers. The students will also be exposed to the various developments and applications associated with electricity markets and how some of the modern applications can be adapted to markets.

The course is divided into two parts: A lecture part that explains all the functions and applications without involving the students in complex mathematical derivations. This is complemented by a hands-on part that allows the student to fully comprehend these applications using one of the most advanced simulation software packages in the market.

During the course, the course speaker will focus on providing personal attention to each participant by reviewing their individual needs from the course, and in discussing problems and issues they face in their own power system. The goal is to combine general

learning using the most effective methods, combined with personal attention to each participant

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

Power System Operation, Monitoring & Control (Hands-On Training)

Target Audience

- ✓ Electrical Engineer
- ✓ Electrical Project Engineer
- ✓ Electronics-research engineer

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

Power System Operation, Monitoring & Control (Hands-On Training)

Learning Objectives

- ✓ Participants in this course will gain foundational knowledge of all major applications and functions in system control, monitoring, and operation.
- ✓ For dispatchers, the course will give them the depth and extent of recent advances in real-time control and monitoring, but will also give them a good appreciation of the operation and study functions.
- ✓ For Operations and study staff, the course will allow them to get deeper into the latest developments in their areas, but will also give them the needed knowledge of what goes on in dispatching. This will allow for harmonious relationships between the two groups.
- ✓ For managers and decision makers, it will provide them with the needed up-to-date information to assist in strategies of maximizing the benefits of various applications, staff management, and even procurement of some critical applications.
- ✓ In all, everyone will be exposed to the issues associated with market operations and their impacts on system control, monitoring, and operation.
- ✓ Furthermore, the students will learn how to solve specific problems using the simulation software.

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Outline

✓ DAY 01

Overviews and Focus on Real-time Control

- ✓ Review of Functions and Applications Associated with Power System Control, Monitoring, and Operation in the Modern SCADA/EMS
- ✓ Review of Advances Associated with Transmission System Operators and Market Administration in Restructured Power Systems
- ✓ Introduction to NERC Standards for System Control, Monitoring, and Operation
- ✓ Real-time Generation Control Principles
- ✓ Economic Dispatch in Realtime Control
- ✓ Introduction to Security Constrained Dispatch

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Outline

✓ Day 02

Power System Monitoring Functions and Applications

- ✓ Overview of Power System Monitoring for Secure System Operation
- ✓ Monitoring the State of the Power System
- ✓ Static Security Assessment and Enhancement
- ✓ Voltage Security Assessment and Enhancement
- ✓ Dynamic Security Assessment and Enhancement

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Outline

✓ Day 03

Power System Operation

- ✓ Overview of Power System Short, Medium, and Long-Term Operation Functions and Applications
- ✓ Advances in Secure Network Operation by means of the Optimal Power Flow
- ✓ Advances in Short-Term Load Forecasting
- ✓ Short-Term Generation Scheduling
- ✓ Overview of Applications Associated with Day-Ahead Scheduling
- ✓ Overview of Applications and Functions of Medium and Long-Term Operation Planning
- ✓ Introduction to Power System Simulation and Operation Package

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Outline

✓ Day 04

Hands-On Exercises with Realtime Control and System Monitoring

- ✓ Generation Control and Performance Standards
- ✓ Static Security Assessment Exercises
- ✓ Security Enhancement Exercises

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

Power System Operation, Monitoring & Control (Hands-On Training)

Course Outline

✓ Day 05

Hands-On Exercises with System Operation

- ✓ Short-Term Load Forecasting Exercises
- ✓ Short-Term Generation Scheduling Exercises
- ✓ Integration of Network Optimization with Short-Term Scheduling

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

Power System Operation, Monitoring & Control (Hands-On Training)

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
Jan. 18, 2027	Jan. 22, 2027	5 days	5950.00 $	switzerland , Geneva
Sept. 20, 2027	Sept. 24, 2027	5 days	4250.00 $	UAE , Dubai
Dec. 14, 2026	Dec. 18, 2026	5 days	4250.00 $	UAE , Abu Dhabi
May 10, 2027	May 14, 2027	5 days	4250.00 $	UAE , Abu Dhabi

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