BOOST
THE LEADING TRAINING PROVIDER

Instrumentation & Controls

Practical SCADA Systems for Industrial Applications

Course Introduction

This course is designed to provide a thorough understanding of the fundamental concepts and the practical issues of SCADA systems. Particular emphasis has been placed on the practical aspects of SCADA systems with a view to the future. Formulae and details that can be found in specialized manufacturer manuals. have been purposely committed in favor of concepts and definitions.

It provides an introduction to the fundamental principles and terminology used in the field of SCADA. It is a summary of the main subjects to be covered throughout the course. SCADA (supervisory control and data acquisition) has been around as long as there have been control systems. The first ‘SCADA’ systems utilized data acquisition by means of panels of meters, lights and strip chart recorders. The operator manually operating various control knobs exercised supervisory control. These devices were and still are used to do supervisory control and data acquisition on plants, factories and power generating facilities.

The second part of this course covers the application of SCADA systems for the monitoring and control of manufacturing facilities within a single site. It also covers the additional elements that are common to all SCADA systems. These include Alarm Management, Human Management Interface (HMI), Network Security, SCADA Historians, Troubleshooting, Mainte-nance and Specification issues.

Target Audience

- Control & Instrumentation Engineer
- Controls Technologist
- Instrumentation Technician / Systems Control Tech
- Senior Control & Instrumentation Engineer
- Maintaining Equipment Engineer
- Facilities I&E / Controls Engineer
- Offshore Instrumentation Engineer

Learning Objectives

- Develop their existing understanding of SCADA system.
- Recognize the different components of a SCADA system
- Appreciate the basic principles of data communications
- Evaluate requirements for PLC-to-SCADA Communications and understand the importance of the ISO OSI Model
- Appreciate the use of wireless communications in the Industrial environment and recognize the various wireless communication standards.
- Apply radio telecommunications in a practical manner and make use of troubleshooting techniques
- Apply Modbus in a practical manner and make use of trou-bleshooting techniques
- Understand the construction, the arc extinguishing principles of Surface Production Facilities Operations
- Acquire the skills and practical knowledge to identify the requirements for SCADA system.
- Develop their existing understanding of Surface Equipment Facilities Troubleshooting

Course Outline

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 7, 2025	April 11, 2025	5 days	4250.00 $	UAE - Abu Dhabi
Aug. 18, 2025	Aug. 22, 2025	5 days	4950.00 $	Spain - Barcelona
Oct. 6, 2025	Oct. 10, 2025	5 days	4250.00 $	UAE - Dubai

FROM	TO	DURATION	FEES	LOCATION
Jan. 6, 2025	Jan. 10, 2025	5 days	4250.00 $	UAE - Dubai
Oct. 13, 2025	Oct. 17, 2025	5 days	4250.00 $	Oman - Muscat