

Course Code – CBS-ISA
OTCS Cybersecurity Awareness and ISA IEC62443

Duration

2 days

Audience

- Executives, Managers, Project Leads, and Architects.

Prerequisites

- Keen interest in cybersecurity
- Familiarity with programming in at least one language

Format

- Virtual Instructor-led
- Lectures and hands-on labs.

Technology Requirements

- Laptop
- Good internet connection to connect to remote labs.

Course Outline

- Understand and apply fundamental concepts and methods related to the fields of information technology and Industrial Automation and Control Systems (IACS) cybersecurity.
- How to align overall organizational operational goals with security functions and implementations
 - The role of managers, hackers, and developers
- Protecting IACS assets against different security threats
- Implement system security
 - Application of security design principals
 - Application of appropriate security control mitigation for vulnerabilities present
 - Cryptography and the security services
 - Concepts and architecture that define the associated technology and implementation systems and protocols at the Open Systems Interconnection (OSI) model layers 1–7.
 - System Lifecycle (SLC)
 - Software Development Lifecycle (SDLC)
- Implementing electronically secure IACS
 - Concepts, models and terminology.
 - Creating and maintaining an effective IACS security program.
 - System design guidance and requirements for the secure integration of control systems
 - Product development and technical requirements of control system product
- ISA IEC62443 standards and implementation in:
 - Security levels
 - Security feedback loops
 - Control systems
- The Cybersecurity Lifecycle applied to IACS