

## ICS/SCADA Cybersecurity

**Course Duration: 24 Hrs.**

**Course code: EICS-SCADA**

### Course Overview

An ICS/SCADA Cybersecurity course provides a comprehensive understanding of securing Industrial Control Systems (ICS) and Supervisory Control and Data Acquisition (SCADA) networks, equipping learners with the knowledge and skills to protect critical infrastructure from cyber threats.

### What you'll learn?

❖ **Understanding ICS/SCADA Systems:**

You'll learn about the fundamental principles, components, and architectures of ICS/SCADA systems, including their purpose and deployment in various industries.

❖ **Cybersecurity Principles:**

The course will introduce you to core cybersecurity concepts, including threats, vulnerabilities, and common attack vectors relevant to ICS/SCADA environments.

❖ **ICS/SCADA Protocols:**

You'll gain knowledge of common protocols used in ICS/SCADA systems, such as Modbus, DNP3, and OPC, and how they relate to security.

### Target Audience

Business System Analysts who support SCADA interfaces. System Administrators, Engineers, and other IT professionals who are administering, patching, securing SCADA, and/or ICS. Security Consultants who are performing security assessments of SCADA and/or ICS.

## Pre-Requisites

### ❖ **Networking Fundamentals:**

A solid grasp of essential networking concepts is crucial, including the OSI model, TCP/IP, networking devices (routers, switches), and transmission media.

### ❖ **Linux Operating System:**

Basic knowledge of Linux command-line usage is beneficial.

### ❖ **Programming/Scripting:**

Conceptual knowledge of programming or scripting is recommended.

### ❖ **Security Concepts:**

Understanding basic security concepts like malware, intrusion detection systems, firewalls, and vulnerabilities is important.

## Course content

Module 1: Introduction to ICS/SCADA Network Defense

Module 2: TCP/IP 101

Module 3: Introduction to Hacking

Module 4: Vulnerability Management

Module 5: Standards and Regulations for Cybersecurity

Module 6: Securing the ICS network.

Module 7: Bridging the Air Gap

Module 8: Introduction to Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS)

## Exam Preference

Exam Code	ICS-SCADA
Number Of Questions	75
Length Of Test	120 Minutes
Passing Score	75%