



Fundamentals of **OT/ICS** **Security**

OT/ICS Security

Course Highlights



20 hrs of instructor-led training



Focuses on theoretical aspects, providing a strong foundation in OT/ICS security fundamentals.



Blended learning delivery model



Taught by experienced instructors with expertise in OT security



Comprehensive introduction to OT/ICS security for IT and OT professionals



Designed to be accessible to participants with varied backgrounds in IT and OT



Covers a wide range of topics, including architecture, threats, riskmanagement, and industry standards

Course Overview

The physical equipment, procedures, and infrastructure employed in a variety of industrial settings, including transportation, energy, manufacturing, and utilities, are monitored or controlled by OT. OT systems are made up of connected control elements that operate together to achieve a certain goal. The Fundamentals of OT/ICS Security course from InfosecTrain aims to provide you with a comprehensive understanding of the entire OT/ICS components, architecture, tools, technologies, best practices and much more.



Why **OT/ICS Security** Training with InfosecTrain?

InfosecTrain is a proficient security training and consulting organization across the globe that specializes in various IT security courses and services. Our OT/ICS training aims to teach the candidates all about the fundamentals of Operational Technology. You can leverage the following benefits with InfosecTrain:

- We can help you present your qualifications and work experience for the designated profile.
- We provide a flexible training schedule.
- We provide post-training assistance.
- We create groups for discussion.
- We also provide a certificate of participation to each candidate.



Target Audience

- ✓ IT professionals seeking to understand OT/ICS security
- ✓ OT professionals with limited security background
- ✓ Security Analysts, Engineers, and Administrators interested in expanding their expertise to OT/ICS security
- ✓ Managers and decision-makers responsible for OT/ICS security

Pre-requisites

- ✓ Basic understanding of IT and/or OT systems
- ✓ Familiarity with computer networking concepts
- ✓ No prior knowledge of OT/ICS security is required

Course Objectives

- ✓ Provide an understanding of the importance of OT/ICS security
- ✓ Develop familiarity with key components, architecture, and protocols in OT/ICS systems
- ✓ Examine the threat landscape, vulnerabilities, and notable incidents
- ✓ Learn to conduct risk assessments and apply mitigation strategies
- ✓ Understand and apply security best practices and industry standards

Course Content

1. Introduction to OT/ICS Security

- Overview of OT and ICS
- Importance of OT/ICS Security
- Differences between IT and OT Security

2. Understanding OT/ICS Components and Architecture

- Key Components in OT/ICS (PLCs, RTUs, DCS, SCADA, HMI, Engineering Workstation etc.,)
- ICS Network Architecture and Protocols
- ICS Network Segmentation and Zoning

3. Threat Landscape and Vulnerabilities

- Common OT/ICS Threats and Attack Vectors
- Vulnerabilities in OT/ICS Systems
- Notable Incidents and Case Studies

4. Risk Assessment and Management

- Risk Assessment Methodologies for OT/ICS
- Mitigation Strategies and Risk Treatment
- Monitoring and Incident Response Planning

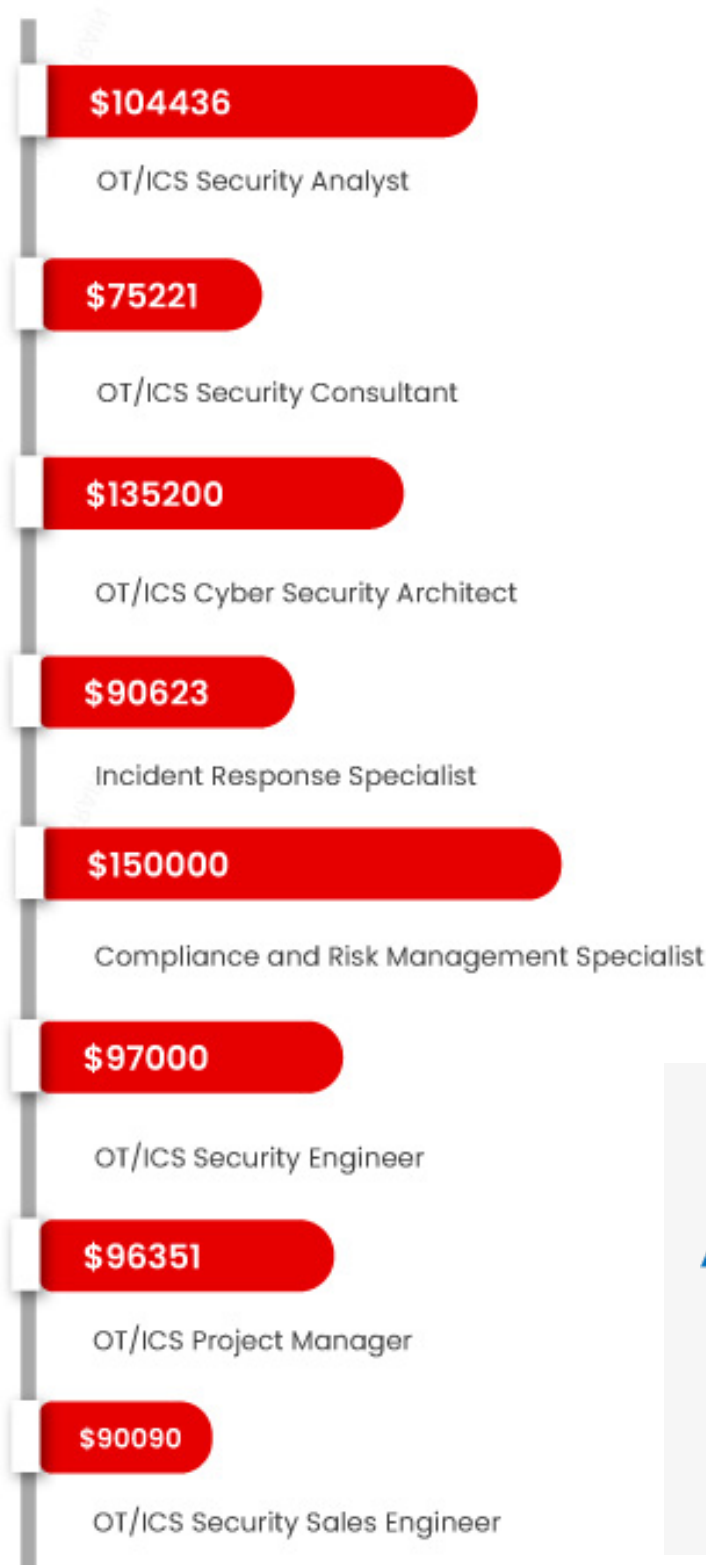
5. OT/ICS Security Best Practices and Standards

- Overview of OT/ICS Security Standards (NIST 800-82, IEC62443, NERC CIP, Sector Specific standards)
- Security Policies, Procedures, and Controls.
- Physical and Environmental Security Considerations.

6. Overview of Tools and Technologies for OT/ICS Security

- Network Traffic Analysis Tools (e.g., Wireshark)
- Network Monitoring and Anomaly Detection Solutions (e.g., Suricata, Snort)
- Firewall and Security Solutions for OT/ICS Environments

Career Benefits



Hiring Companies



HCL **accenture**
IBM **SONY**
vagaro