

Switching & Routing in Industrial Networks - Virtual (IEN-IKOILSWROU1A)

Type

Virtual Instructor-led Learning

Duration and Continuing Education Units (CEU)

10 Hours (Schedule varies)
0 CEUs

Target Group

- Engineer

Short Description

This virtual course is for users who are involved with developing or sustaining automation networks in an industrial environment. This includes, but is not limited to the following: • Plant Engineers • Control Engineers • System Engineers • Commission Engineers • Application Engineers • Operations or IT Network Engineers • Facility Managers • Project Engineers

This course is one of three certification courses offered under the Siemens Certified Professional for Industrial Networks (CPIN) program. The curriculum covers Network solutions and how they connect to real-time systems in theory and in practice. It also addresses the requirements and fundamental principles of industrial routing solutions.

Objectives

- Differences between Ethernet and Industrial Ethernet topologies
- IPv4 and IPv6 basics (addressing, data exchange, important protocols)
- Redundancy Protocols (MRP, HRP, Standby Redundancy Protocol, RSTP, Passive Listening, HSR, and PRP)
- Network Segmentation with VLANs
- Static routing
- Router redundancy (VRRP)
- Dynamic routing (RIP, OSPF)
- Diagnostics and troubleshooting
- Practical exercises using the SCALANCE X product line

Content

- Switching
- Routing

Language

English
