

Workshop for Educators S7-1500 (SCT-WSSCEW5A)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

3 Days
0 CEUs

Target Group

- Other

Short Description

Siemens Workshops for Educators are a series of hands on educational events designed to help instructors build skills in modern industrial automation technologies. This workshop follows the Siemens Cooperates with Education (SCE) curriculum and guides participants from foundational TIA Portal concepts through structured programming, diagnostics, distributed I/O, analog processing, and HMI integration using SIMATIC S7 1500 systems. Participants work with a conveyor based training system and gain practical experience developing, testing, troubleshooting, and enhancing PLC programs using industry relevant tools and work flows. All workshops emphasize instructor led learning with extensive hands on exercises.

Content

- TIA Portal interface, project structure, and system setup
- SIMATIC S7 1500 hardware architecture and PROFINET networking
- PLC tag management, monitoring, and retentive memory concepts
- LAD programming fundamentals and structured programming methods
- Functions (FCs), Function Blocks (FBs), instance data blocks, and multi instancing
- IEC timers, counters, and fault handling strategies
- Global data blocks, data types, and best practices for data management
- Integration of distributed I/O (ET200SP) and analog signal processing
- Signal scaling, normalization, and interpretation of analog values
- HMI configuration, PLC HMI data exchange, and system operation via touch panels
- Diagnostics, troubleshooting tools, and system performance analysis

Language

English
