

Attention: The following topics are *not* addressed during this class:

- PLC programming
- Motion Control
- TwinSAFE
- Fieldbuses not described in the topics below

Prerequisite:

Students are expected to know basic computer skills, including file and folder management.

Topics Covered

Documentation – Catalog and Information System

I/O and Bus coupler Diagnostics

- Hardware Identification
- EtherCAT I/O Hardware
- K-Bus
- Terminal Wiring
- Grounding
- Power Rail
- Replacing Terminals
- Bus Coupler LEDs

TwinCAT Architecture

- TwinCAT System Service
- TwinCAT System Manager
- TwinCAT PLC Control

TwinCAT System Manager

- Menus and Controls
- System Configuration
- NC Configuration Overview
- PLC Configuration
- IO Configuration
- Scanning for Hardware

Using the System Manager as a troubleshooting tool

Troubleshooting EtherCAT networks

Troubleshooting K-bus networks

IPC Diagnostics

Connecting PLC Variables to Hardware

- Creating the *.tpy file
- Appending the PLC project to the System Manager
- Linking the PLC variables to Hardware
- Simple PLC Program – Connecting inputs and outputs

Scope View

Installing TwinCAT

- Selecting the Correct Build
- Downloading from the Web
- Restoring Licenses

Remote Connections