



Advanced Fieldbus Technology

Course Description

This course is a continuation of the concepts presented in Fieldbus Inc.'s FOUNDATION Fieldbus Overview Course. It is primarily for people interested in learning more details on the inner workings of Fieldbus. The course includes information for end users, product developers, and anyone who needs to understand FF. Usage of diagnostic tools and devices will demonstrate diagnostic techniques and course concepts. By the end of this course, participants should gain an understanding of fieldbus that allows them to discuss fieldbus in detail and even perform basic troubleshooting effectively in the field.

Course Outline

- Detailed concepts and applications of the terminology related to FF technology
- Information necessary to communicate with equipment suppliers and accurately describe fieldbus issues
- Basic design and practical considerations for developing an FF product including devices or host systems
- Basic design and practical considerations for wiring and installing an FF network including Intrinsically Safe and FISCO systems
- Installation issues including power requirements, termination, shielding, topology, and FF specific wiring practices
- Default and configured values
- Basic communication mechanisms and related concepts using various troubleshooting tools
- Detailed failure modes and troubleshooting techniques
- Issues related to various control strategies, loop configurations, and device types used in target segments
- FF Function Blocks with focus on the most common blocks
- Details of configuration, defaults, special features, usage, device descriptions, and capabilities files
- Differences between registered and custom blocks
- Interaction of device descriptions and capabilities files
- Hands-on training with actual fieldbus instruments
- Details of installation, schedule downloads, and configuration
- Procedures to install devices, configure devices, and download schedules to H1 devices
- Diagnostics available from the devices and special features of fieldbus
- Troubleshooting and determination quality of control communication
- Independent troubleshooting in the field
- Application of mode, status, links, alarms, and trends in troubleshooting techniques

Background and Prerequisites

The course assumes completion of the FOUNDATION Fieldbus Overview course. Review of the Fieldbus Inc. Fieldbus Primer would help prepare and provide background for some of the concepts covered.

Why Fieldbus Inc.

- Trainers are FOUNDATION fieldbus experts (minimum 10 years of Fieldbus experience)
- Small Class size (limited to 6 students)
- Trainers have field experience and process control backgrounds

Course Length: 2 days

Course Cost: \$1,650.00 per student (course materials and lunches included)

Location: FI Training Center in Austin, Texas

Dates: 26-27 August 2009