



## Engineering a Fieldbus Project

### Course Description

This course is primarily for people that will be performing design of fieldbus control strategies and segment layouts. Hands-on usage of configuration tools and devices will be used to demonstrate application of concepts. The FOUNDATION Fieldbus Overview course is a prerequisite since concepts are covered in greater detail in this course. Discussion topics will include project engineering standards, host system selection, control design, and segment layout. Information from this course can be used to design fieldbus segments.

### Course Outline

- Review and further explanation of concepts and terminology related to FF technology
- FF concepts necessary to write clear explanations of design
- Practical design considerations for wiring and installing an FF network including Intrinsically Safe systems.
- Impact of power requirements, topology, redundancy, and FF specific wiring practices
- Equipment requirements for desired segment implementation
- Basic communication mechanisms and related concepts
- Control strategies, loop times, and device types available for target segments
- Impact of configuration on communication mechanisms and control schemes
- FF Function Blocks and non-specified Custom Blocks
- Registration of blocks and related support materials
- Blocks are required for desired control schemes, as well as limitations that may exist.
- Application of FF Device Description and capabilities file technology
- Concepts of mode, status, links, alarms, and trends
- Impact of features on control strategy
- Key host features
- Impact of interpretations on H1 device usage
- View demonstration using actual fieldbus instruments
- Demonstration of installation, design, configuration, and download of H1 devices and loops
- Demonstration of special features and benefits of fieldbus

### 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:** 22-23 July 2009