



## **Infi90 101 Course Syllabus**

### **System Architecture, Monitoring, Basic Troubleshooting**

#### **Synopsis:**

Infi90 101 provides the engineer or technician with a basic understanding of the Infi90 system architecture, point addressing, exception reporting, commonly used function codes, understanding Bailey CAD drawings, point monitoring, and basic troubleshooting. Hardware covered is based on the system installed in the customer's plant.

#### **Prerequisites:**

Attendees should have a technical background with a general understanding of process control and instrumentation.

#### **Course Duration:**

Five (5) Days

#### **Course Outline:**

1. Infi90 System Architecture
  - a. Plant Loop, InfiNet, Cnet (Data Highway) Single Ring / Multi-Ring
  - b. Module Bus or Controlway
  - c. Expander Bus (Slave Bus)
  - d. Node Types
2. Point Addressing
  - a. Ring or Loop
  - b. PCU (Process Control Unit) or Node
  - c. MADR (Module Address)
  - d. Block Address
3. Exception Reporting
  - a. Explain Exception Reporting and why it is used
  - b. Exception Reporting Function Codes
  - c. Exception Report Types
  - d. Significant Change and Signal Quality for Analog Data Types

- e. Alarming and Deadband
- 4. Commonly used Function Codes
  - a. What is a function code
  - b. The Function Code Manual
  - c. Types of specifications
  - d. Fixed blocks for modules used in customer system
  - e. Executive blocks and segment control blocks
  - f. Basic Tuning
- 5. Bailey CAD Drawings
  - a. Structure of Block symbols
  - b. Smart drawing borders
  - c. Sheet to sheet references
  - d. External connection drawings
  - e. Line types
- 6. Point Monitoring
  - a. Using the EWS (Engineering Work Station) software
  - b. Using the CTM or CTT
  - c. Using the operator console
- 7. Basic Troubleshooting
  - a. Following logic
  - b. I/O Card troubleshooting
  - c. Termination Units and Dipshunts
  - d. Loop communications
  - e. Slave and module failures
  - f. Power system
  - g. Grounding System
  - h. System Status Messages
  - i. System Status Alarms
- 8. System Maintenance
  - a. Recommended maintenance periods
  - b. Cabinet cleaning
  - c. Checking connections and grounding

d. Checking Power system for proper voltage and AC Ripple