

InBatch Batch Management 2014 R3 Rev B

Course Description

The InBatch Batch Management 2014 R3 Rev B course is a 5-day, instructor-led class designed to provide a fundamental understanding of the features and functionality of the InBatch software. The course provides lectures and hands-on labs to supply and reinforce the knowledge necessary to apply InBatch to a batch processing plant application. This includes creating the plant model, creating recipes, simulating their execution, and connecting InBatch to a plant control system.

Objectives

Upon completion of this course, you will be able to:

- Understand InBatch software components
- Define and configure a process plant model in InBatch
- Define and track material consumption and production
- Create recipes and simulate their execution against a process model
- Schedule and run batches
- Record and report batch events and production data
- Connect InBatch to field I/O
- Integrate InBatch with InTouch (tag-based)
- Integrate InBatch with System Platform (object-based)
- Configure InBatch security
- Use InBatch graphics to construct a custom Operator interface in InTouch

Target Audience

- Individuals who need to configure or modify InBatch applications

Prerequisites

Knowledge of the following tools, features and technologies is required:

- For all students:

- Manufacturing industry concepts
- Concept of a batch process
- Networking for configuring InBatch OS-based security

- For integration of InBatch with **InTouch tag-based** applications:

- Creating an InTouch application
- Tags
- Creating Windows in InTouch
- Access Names
- ArcestrA symbols
- Importing objects
- .NET controls

- For integration of InBatch with **InTouch for System Platform** applications:

- Creating an InTouch application
- Creating Windows in InTouch
- ArcestrA symbols
- .NET controls

- For integration of InBatch with **Application Server**:
 - Creating a Galaxy
 - Automation objects
 - Object Viewer
 - Deployment model
 - Security

- For integration of InBatch with a plant control system:
 - Device Integration Servers
 - PLC

Course Outline

Module 1 – Introduction

Section 1 – Course Overview

Section 2 – InBatch Overview

Section 3 – Components and System Requirements

Section 4 – Architecture and Licensing

Module 2 – The Environment Display

Section 1 – Environment Manager Overview and Operation

Module 3 – Process Modeling

Section 1 – Process Modeling

Section 2 – Process Model Editor

Section 3 – Equipment Status

Section 4 – Classes

Section 5 – Phases

Section 6 – Enumeration

Section 7 – Units of Measure

Section 8 – Tags and Parameters for Phases

Section 9 – Control Buttons and Interlocks

Section 10 – Model Validation and Database Synchronization

Module 4 – Trains

Section 1 – Use and Definition of Trains

Module 5 – Materials

Section 1 – Materials and Characteristics

Section 2 – Assigning Materials and Receiving Materials

Module 6 – Recipes

Section 1 – Recipes and the Recipe Editor

Section 2 – Recipe Validation and Approval

Module 7 – Batch Management

Section 1 – Batch Scheduling

Section 2 – Batch Display Operation

Module 8 – Advanced Topics on Recipes and Batches

Section 1 – Formula Management

Section 2 – Reusing a Recipe

Section 3 – Equipment Availability and Allocations

Section 4 – Equipment Instances in Recipes

Section 5 – Recipe Transitions and Loopbacks

Section 6 – Batch Synchronization at Restart

Module 9 – History and Reporting

Section 1 – History System

Section 2 – Process Logger System

Section 3 – Reporting System

Module 10 – InBatch Data Connections

Section 1 – Overview

Section 2 – InBatch Connection to Control Systems Using IBCli

Module 11 – Security System

Section 1 – InBatch Security System Overview

Section 2 – InBatch Standard Security

Section 3 – InBatch Security Using Operating System

Module 12 – InBatch Integration with InTouch

Section 1 – InBatch Data in InTouch

Module 13 – InBatch Integration with System Platform

Section 1 – Connecting InBatch to a Galaxy

Section 2 – ArcestrA Security with InBatch

Module 14 – InBatch GUI Controls

Section 1 – Introduction

Section 2 – InBatch .NET GUI Controls