

## COURSE DESCRIPTION

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

## OBJECTIVES

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

- Define and configure a process model
- Create recipes and simulate their execution against a process model
- Schedule and run batches
- Configure Batch Management security
- Using System Platform to connect Batch Management to field I/O
- Use Batch Management graphics to build user interfaces to InTouch

## AUDIENCE

- Application developers
- Engineers
- System integrators
- Other individuals who work with batching systems in their manufacturing processes

## PREREQUISITES

- Manufacturing industry experience
- Basic knowledge of batch systems
- Experience using Microsoft Windows
- Basic knowledge of Application Server and InTouch for System Platform
- Basic knowledge of InTouch

## COURSE OUTLINE - AVEVA BATCH MANAGEMENT

### MODULE 1 - INTRODUCTION

- Section 1 - Course Introduction
- Section 2 - Batch Management Overview
- Section 3 - Installation, Components & System Requirements

## **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 - Interlock and Control Buttons
- 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, 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
- Section 2 - Process Logger System
- Section 3 - Reporting System

## **MODULE 10 - INBATCH CONNECTIONS**

- Section 1 - Overview
- Section 2 - Batch Management Connection to Control Systems

## **MODULE 11 - SECURITY SYSTEM**

- Section 1 - Batch Management Security System Overview
- Section 2 - Batch Management Standard Security
- Section 3 - Batch Management Security Using Operating System

## **MODULE 12 - BATCH MANAGEMENT INTEGRATION WITH INTOUCH**

- Section 1 - Batch Management Data in InTouch

## **MODULE 13 - BATCH MANAGEMENT INTEGRATION WITH SYSTEM PLATFORM**

- Section 1 - Connecting Batch Management to a Galaxy
- Section 2 - ArchestrA Security with Batch Management

## **MODULE 14 - BATCH MANAGEMENT GUI CONTROLS**

- Section 1 - Introduction
- Section 2 - Batch Management .NET GUI Controls