

## COURSE DESCRIPTION

The MES Performance course is a 3-day, instructor-led class designed to provide a working knowledge of the features and functionality of AVEVA™ MES/Performance. The course uses lectures and hands-on labs to provide the knowledge needed to use AVEVA MES/Performance. The class will demonstrate how to configure and deploy a data collection system to analyze and report equipment utilization, availability, quality, and performance using AVEVA Application Server objects. Both the MES Client and Web Portal will be addressed.

## OBJECTIVES

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

- Configure and license Middleware connections within a single node or between multiple nodes in a network
- Model plant equipment (entities) in the MES database
- Define entity utilization states and reason codes
- Enable capabilities in the Utilization Capability Object to track Performance Events in a production environment
- Use objects in a Galaxy to automatically track equipment utilization
- Manage work orders and jobs within MES
- Use the MES Client and Performance Web Portal to define the information necessary to collect Overall Equipment Effectiveness (OEE) data
- Use MES/Performance as a central downtime information repository and reporting tool
- Retrieve and report downtime data and analyze OEE
- Use the MES Galaxy objects to report OEE
- Use MES .NET controls to access OEE data

## AUDIENCE

- Application developers
- Engineers
- System Integrators

## PREREQUISITES

- Manufacturing industry experience
- Working knowledge of System Platform is recommended

## COURSE OUTLINE - MES PERFORMANCE

### MODULE 1 - INTRODUCTION

- Section 1 - Course Introduction
- Section 2 - MES/Performance Overview
- Section 3 - MES/Performance Components
- Section 4 - System Requirements and Licensing

### MODULE 2 - MES CLIENT AND WEB PORTAL

- Section 1 - MES Client and Web Portal
- Section 2 - Security

### MODULE 3 - UTILIZATION AND ENTITIES

- Section 1 - Utilization Overview
- Section 2 - Entities Overview
- Section 3 - Utilization States and Reasons
- Section 4 - Performance Events

### MODULE 4 - OEE AND LINES

- Section 1 - Line Introduction
- Section 2 - Shifts and Shift Schedules
- Section 3 - Items
- Section 4 - Single Entity Lines
- Section 5 - Work Orders

### MODULE 5 - MULTI-ENTITY LINES

- Section 1 - Multi-Entity Lines
- Section 2 - Parallel Equipment

### MODULE 6 - AUTOMATING PERFORMANCE

- Section 1 - Modeling Overview
- Section 2 - Utilization Capability Object Overview
- Section 3 - Entity Model Builder
- Section 4 - Operations Capability Object Overview
- Section 5 - MES Objects in Runtime

### MODULE 7 - VISUALIZATION

- Section 1 - Visualization Overview

# MES PERFORMANCE



## **MODULE 8 - REPORTS**

- Section 1 - ArchestrA Reports

## **MODULE 9 - APPLICATION MAINTENANCE**

- Section 1 - Middleware Maintenance
- Section 2 - Database Maintenance
- Section 3 - Data Backup