AVEVA PLANT SCADA
(FORMERLY CITECT SCADA)

Q•MATION

COURSE DESCRIPTION

The AVEVA™ Plant SCADA tag-based course is a 4-day, instructor-led class focused on HMI application design. The course uses lectures and hands-on labs to provide a fundamental understanding of the basic principles of the Plant SCADA visualization module and the steps to develop a Human Machine Interface (HMI) system for your specific plant floor. You will be guided through the setup, layout, best practice concepts, features, and functions of the Plant SCADA software platform. Hands-on labs will reinforce concepts and features.

OBJECTIVES

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

- Create new projects
- Use Plant SCADA to communicate with an I/O device
- Utilize the benefits of an equipment hierarchy
- Create graphic pages and manipulate graphic symbols
- Generate and manage alarms, trends, and reports
- Troubleshoot and resolve problems encountered during the course
- Use the online Plant SCADA Help Topics and Knowledge Base effectively

AUDIENCE

Plant floor operators and managers, system administrators, system integrators, and other Individuals who need to use the Plant SCADA software in manufacturing processes.

PREREQUISITES

- Familiarity with Microsoft Windows
- Manufacturing industry experience (recommended)

COURSE OUTLINE

MODULE 1 – INTRODUCTION TO AVEVA PLANT SCADA

- Section 1 – Plant SCADA Configuration
- Section 2 – Plant Studio
- Section 3 – Plant Graphics Builder
- Section 4 – Summary

AVEVA PLANT SCADA

Q•MATION

MODULE 2 – OVERVIEW OF CITECT STUDIO

- Section 1 – Activities
- Section 2 – Navigation
- Section 3 – The Grid Editor
- Section 4 – Property Grid
- Section 5 – Summary

MODULE 3 – PROJECT MANAGEMENT

- Section 1 – Projects Activity
- Section 2 – Plant SCADA Project Types
- Section 3 – Include Projects
- Section 4 – New Project Creation
- Section 5 – Backup, Restore, and Delete a Project
- Section 6 – Copy a Project
- Section 7 – Include Custom Projects
- Section 8 – Setup Wizard
- Section 9 – Summary

MODULE 4 – DEFINE A TOPOLOGY

- Section 1 – Plant SCADA Communications
- Section 2 – Topology Activity
- Section 3 – Configuring Topology
- Section 4 – Device Communications Wizard
- Section 5 – Summary

MODULE 5 – SYSTEM MODEL

- Section 1 – System Model Activity
- Section 2 – Variable Tags
- Section 3 – Test Communications
- Section 4 – Structured Tag Names
- Section 5 – Use Microsoft Excel to Add Variable Tags
- Section 6 – Summary

MODULE 6 – EQUIPMENT

- Section 1 – Enterprise Hierarchy
- Section 2 – Using Work Centers
- Section 3 – Work Units
- Section 4 – Equipment in Plant SCADA
- Section 5 – Configuring Equipment
- Section 6 – Configuring Equipment Using Equipment Editor
- Section 7 – Duplicate Equipment
- Section 8 – Summary

MODULE 7 – GRAPHICS

- Section 1 – Graphic Pages
- Section 2 – SxW_Style_Include Project
- Section 3 – Create New Pages
- Section 4 – Draw Basic Objects
- Section 5 – Draw the Main Graphics Page
- Section 6 – Rectangles, Squares, Ellipses, and Circles
- Section 7 – Pipes, Lines, and Polylines
- Section 8 – Runtime Properties
- Section 9 – Custom Symbols
- Section 10 – ActiveX
- Section 11 – Summary

MODULE 8 – OPERATOR INPUT

- Section 1 – Slider Controls
- Section 2 – Touch Commands
- Section 3 – Keyboard Commands
- Section 4 – Summary

MODULE 9 – GENIES

- Section 1 – Paste a Genie from the Libraries
- Section 2 – Custom Genies
- Section 3 – Modify a Genie
- Section 4 – Genie Syntax
- Section 5 – Link a Genie to an Equipment Type
- Section 6 – Paste a Linked Genie using the Equipment Editor
- Section 7 – Summary

MODULE 10 – POPUP PAGES

- Section 1 – Popup Pages
- Section 2 – Using Equipment References with Dynamic Associations
- Section 3 – Summary

MODULE 11 – DEVICES

- Section 1 – What are Devices?
- Section 2 – Set Up Devices
- Section 3 – Device History Files
- Section 4 – Summary

MODULE 12 – EVENTS

- Section 1 – Define Events
- Section 2 – Enable Events
- Section 3 – Summary

MODULE 13 – ALARMS

- Section 1 – Configure Alarms
- Section 2 – Alarms and Equipment
- Section 3 – Alarm Categories
- Section 4 – Device Groups
- Section 5 – Alarm Properties as Tags
- Section 6 – Summary

MODULE 14 – PROCESS ANALYST

- Section 1 – Trend Tags
- Section 2 – Trend History Files
- Section 3 – What is the Process Analyst
- Section 4 – Pen Types
- Section 5 – Change the Properties of the Process Analyst
- Section 6 – Other Data Sources
- Section 7 – Data Export
- Section 8 – Summary

MODULE 15 – PAGE MANAGEMENT

- Section 1 – Menu Configuration Tool
- Section 2 – Re-order Menu Items
- Section 3 – SxW Style Navigation
- Section 4 – Summary

MODULE 16 – REPORTS

- Section 1 – Define a Report
- Section 2 – View Reports
- Section 3 – Summary

MODULE 17 – SECURITY

- Section 1 – Plan Plant Security
- Section 2 – User Privileges
- Section 3 – Areas and Privileges
- Section 4 – Allocate Privileges and Areas
- Section 5 – Add User Records
- Section 6 – Restrict Access to Objects
- Section 7 – Manage In-Project Authentication
- Section 8 – Object Security
- Section 9 – Project Security
- Section 10 – Operating System Security
- Section 11 – Runtime Manager
- Section 12 – Summary

MODULE 18 – COURSE SUMMARY

- Section 1 – Summary of Plant SCADA Configuration