

Duration: 5 days

Delivery Format: Instructor-led, classroom-based

Summary: This course provides an overview of AADvance® Hardware, software, configuration, program development and troubleshooting. The course consists of a mixture of lectures, demonstration and hands-on lessons.

Audience/Who should attend: Personnel responsible for designing, configuring programming, and troubleshooting an AADvance system.



Objectives

After completing the course, the student should be able to:

- + Find and use available resources when designing, implementing and supporting an AADvance system.
- + Identify fail-safe and fault-tolerant architectures.
- + Determine the components used in the system.
- + Install and wire an AADvance System
- + Create, modify, test, download and update projects using SIS Workstation.
- + Create functions and function blocks.
- + Pass safety-critical data between controllers.
- + Understand and configure the different communication capabilities.
- Utilize the version control features.
- Troubleshoot a system, replace modules and update the firmware of AADvance processors and IO modules.

Prerequisite(s)

- + General knowledge of Programmable Logic Controllers (PLCs).
- + General understanding of network communications
- + Background in industrial electronic control principles and practices.
- General understanding of Functional Safety, Functional Safety Management and the application of IEC 61511 or equivalent standard





Student Materials

To enhance and facilitate the student learning experience, the following materials are provided in a printed format:

- + Student Manual: Copy of slides presented during the training.
- Lab Manual: Provides learning activities and hands-on practice.

Language

The training course is presented in English. All student materials are provided in English.

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Agenda

Day 1

- + Course Overview
- + AADvance System Overview
- + Communications Architectures
- + Identifying AADvance Components
- + Installing and Wiring an AADvance System

Day 2

- + Developing a Program
- + Simulating and Testing a Project
- + Downloading and Monitoring a Project
- + Creating and Using Functions and Function Blocks

Day 3

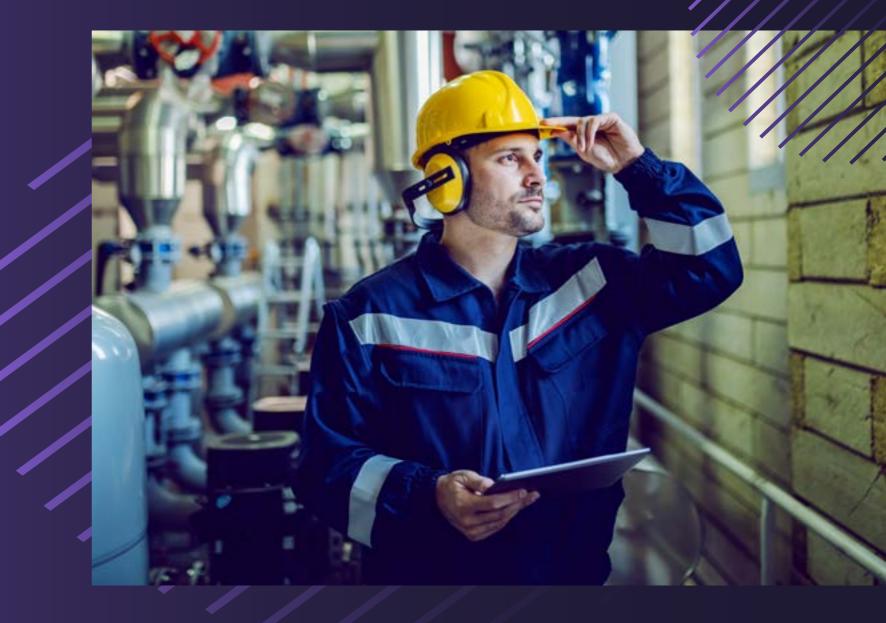
- + Updating a Running Project
- + Managing AADvance Version Source Control
- + Importing and Exporting AADvance Elements
- + Archiving and Restoring an AADvance Project
- + Protecting an AADvance Project
- + Configuring Communications
- + Mapping Binding Between AADvance Controllers

Day 4

- + Configuring OPC Communications
- + Configuring Modbus Communications
- + Configuring P2P Communications
- + Configuring CIP Communications
- + Configuring SOE
- + Configuring HART

Day 5

- + Troubleshooting an AADvance System
- + Updating AADvance Controller Firmware
- + What's New and Coming
- + Integrated Practice Developing an AADvance Project







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