

Course description

A390

Safeguard 400 Series Configuration, Programming and Maintenance

Course goal

The goal of this course is to give the participants a system overview and knowledge regarding configuration, programming and maintenance of the Safeguard 400 Series.

Learning objectives

Upon completion of this course the participants will be able to:

- Describe the architecture of Safeguard 400 Series
- Specify the functionality of Safeguard in the configuration file by using the Safeguard Configuration Builder
- Bypass Management
- Configure the Safeguard controller with the corresponding I/O's
- Create ESD and F&G applications by using the On Line Builder / Safety Builder
- Cause and Effect multiplexer
- Dual handling

Participant profile

This training is targeted to application engineers and maintenance personnel.

Prerequisites

Students should have completed the A331 (AMPL Programming) course or have experience associated with the content of the course.



Topics

- Single and redundant system
- Shutdown (ESD) applications
- Fire & Gas applications
- Critical input signals (SDI & SAI)
- Fire inputs (FI)
- Gas inputs (GI)
- MasterVote output stage 3000 (NE / ND)
- Application programming
- System messages
- Fault locations
- Maintenance
- Communication with Addressable Detector Systems
- Safety Manual
- Certification

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Duration

The duration is 5 days.

Course description

A390

Safeguard 400 Series Configuration, Programming and Maintenance

Course outline

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none">■ Course overview■ Safeguard architecture■ MasterVote 3000■ Configuration parameters■ Safeguard Configuration Builder	<ul style="list-style-type: none">■ Dual Handling■ Safety Digital Inputs (SDI)■ Safety Analog Inputs (SAI)■ Application programming with AMPL	<ul style="list-style-type: none">■ Application programming with Safety Builder■ C&E matrix multiplexer■ Load in matrixes.	<ul style="list-style-type: none">■ Loop supervised digital inputs (FI)■ Catalytic and general Gas detectors■ Fire and Gas applications■ Addressable detector systems, Fireguard / Autronica	<ul style="list-style-type: none">■ Loading a new application into a running system■ Test and commissioning■ Fault tracing and maintenance■ Documentation■ Safety Manual■ Certification

ABB University

BU Process Industries Products

www.abb.com/controlsystems

www.abb.com/abbuniversity

Power and productivity
for a better world™

