

# Safety

## GuardLogix Application Development and Troubleshooting Course Description

### Course Agenda

#### Day 1

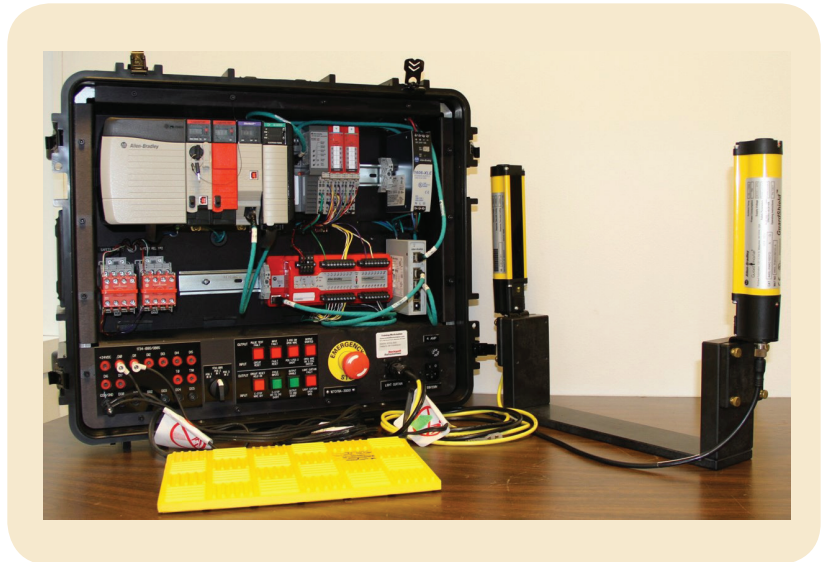
- Identifying GuardLogix Controller Functionality
- Identifying GuardLogix System Hardware Components
- Configuring GuardLogix Controller Properties and Safety Options
- Configuring Guard I/O Safety Modules for a GuardLogix Project
- Downloading and Uploading a GuardLogix Project

#### Day 2

- Producing and Consuming GuardLogix Safety Data Over an EtherNet/IP Network and Mapping Safety Tags
- Programming a Dual Channel Input Stop Instruction
- Programming a Dual Channel Input Stop with Test and Mute Instruction
- Programming Sensor Muting Instructions
- Programming a Configurable Redundant Output Instruction
- Programming a Five Position Mode Selector Instruction
- Programming a Safety Mat Instruction

#### Day 3

- Troubleshooting GuardLogix Controller Problems
- Troubleshooting and Replacing Guard I/O Safety Modules
- Integrated Practice: Programming Safety Instructions
- Integrated Practice: Troubleshooting GuardLogix System Components



### Course Number

SAF-LOG104

### Course Purpose

Upon completion of this course, you will be able to create a Studio 5000 Logix Designer® project for a GuardLogix® system and troubleshoot a previously operational GuardLogix system.

You will have the opportunity to develop and practice these skills by:

- Learning GuardLogix concepts and terminology
- Creating and configuring a GuardLogix project:
- Adding and configuring CompactBlock™ Guard I/O™ and POINT Guard I/O™ safety modules:
- Generating Safety Signatures and locking/unlocking a GuardLogix controller
- Programming safety instructions
- Troubleshooting a GuardLogix project

## Who Should Attend

This course is intended for individuals who need to create, monitor, and troubleshoot Studio 5000 Logix Designer projects and hardware for GuardLogix systems.

## Prerequisites

To successfully complete this course, the following prerequisites are required:

- Understanding of international machine safety standards
- Verified completion of either of the following courses:
  - *Studio 5000 Logix Designer Level 3: Project Development* (Course Number CCP143)
  - *Accelerated Logix 5000 Programmer Certificate Course Level 1* (Course Number CCP250)

## Technology Requirements

All technology is provided for student use in the classroom by Rockwell Automation. It is not necessary for students to bring any technology with them when attending this course.

## Student Materials

To enhance and facilitate the students' learning experiences, the following materials are provided as part of the course package:

- *Student Manual*
  - Includes the key concepts, definitions, examples, and activities presented in this course
- *Lab Book*
  - Provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback.
- *Studio 5000 Logix Designer and Logix5000 Procedures Guide*
  - Provides step-by-step instructions for tasks that are common to all Logix 5000 hardware platforms. By following the procedures in this job aid, you can immediately apply what you learn to your own work.

## Hands-On Practice

Throughout the course, you will have the opportunity to practice skills you have learned through a variety of hands-on exercises:

- Exercises focus on the skills introduced in each lesson.
- Exercises are performed on a GuardLogix workstation.

## Next Learning Level

Once you have an understanding of the topics and skills covered in this course, you may want to attend specific safety training such as:

- *Safety Relays and Devices Maintenance and Troubleshooting* (Course Number SAF-COM101)

## Course Length

This is a three day course.

## IACET CEUs

Rockwell Automation is authorized by IACET to offer 2.1 CEUs for this program.



## To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley® Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at <http://www.rockwellautomation.com/training>

Rockwell Automation is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU. [Click here](#) to view the Rockwell Automation Certificate of Accreditation.

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