

# Virtual Classroom Course Description



Machine Functional Safety and ISO 13849 System Design:  
Risk Assessment



## Course Agenda

Machine Functional Safety & ISO 13849 System Design: Risk Assessment

- Define the scope of the risk assessment
- Identify the hazards
- Determine the risk level of each hazard
- Identify potential risk reduction techniques
- Choose risk reduction techniques
- Write a risk assessment report

## Course Number

VC-MFSISO-A

## Course Purpose

This course will teach you how to use a structured risk assessment process based on ISO 13849. You will learn how to identify the hazards of a machine, estimate the level of risk, and choose risk reduction techniques.

During the exercises, you will make your decisions using the terms and rating system from ISO 13849. As you work through the process, you will build documentation that you can use throughout the lifecycle of your machines

LISTEN.  
THINK.  
SOLVE.

## Who Should Attend

Design engineers, maintenance managers, or people in health and safety roles should attend this course.

## Prerequisites

Experience with the design, development, maintenance, or supervision of industrial automation systems is required.

## Technology Requirements

- A computer and phone are required. For minimum computer requirements for the virtual classroom tool, please visit: <http://support.webex.com/support/system-requirements.html>

## Student Materials

You will receive the following materials, in electronic format, to print on your own and use during the course and when you conduct your own risk assessments:

- Machine Functional Safety & ISO 13849 System Design Procedures Guide
- Risk Rating Log template
- Student Workbook

## Hands-On Practice

During the course, your instructor will demonstrate how to perform each task using common examples. After each demonstration, you will practice the task using the job aid and examples. Your practice includes a sample project that you will work through as you work through the course.

## Next Learning Level

For instructor-led training related to machine functional safety, consider the following courses:

- *Functional Safety for Machinery Introduction*  
(Course Number: SAF-TUV1)
- *GuardLogix Fundamentals and Troubleshooting*  
(Course Number: SAF-LOG103)
- *Safety Relays and Devices Maintenance and Troubleshooting*  
(Course Number: SAF-COM101)

## Course Length

120 minutes

## Virtual Classroom Learning Activities and Features

Rockwell Automation Virtual Classroom training is delivered by a live instructor using a blended learning style, which includes a combination of PowerPoint presentations, video, and/or animations, as well as interactive practice. Courses can include various learning activities and features:

- Polls/surveys
- Group and private chat
- White board
- Desktop sharing
- Passing control to students
- Break out rooms for small group discussion
- Check knowledge through testing

## IACET CEUs

Rockwell Automation is authorized by IACET to offer 0.2 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.

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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