

Functional Safety for Machinery Technician Certification (TÜV Rheinland)

OEM: Rockwell Automation • Duration: 2 Days (16 hrs) • Code: SAF-TUV0T

COURSE MODULES & TOPICS

Objectives

- Understand the Functional Safety for Machinery Technician Certification (TÜV Rheinland)
- Define: Legal Guidelines and Standards
- Risk Analysis and Processes (ISO 12100:2010)
- Basic Electrical Safety Principles (IEC 60204-1)
- Basic Safety Principles
- Machine Guarding Principles
- Identify: Safety Functions
- Safety Devices
- Circuits, Schematics, and Examples
- New Standards Regarding Safety of Machinery
- Evaluate Machine Safety Using a Practical Example

Prerequisites

- Required: Minimum of 2 years experience working on industrial machinery
- A completed and approved eligibility form to receive certification (see details in the next section)
- Recommended — Basic working knowledge of electrical and electronic control functions for machinery
- Recommended — Awareness of basic safety principles

Student Materials

- Student Manual includes the key concepts, definitions, examples, and activities presented in this course

Next Level Learning

- Functional Safety for Machinery Introduction course (SAF-TUV1)
- Safety Relays and Devices Maintenance and Troubleshooting course (SAF-COM101)

Certificate Eligibility Requirements

- Before taking the course, an eligibility form from TÜV Rheinland must be completed and approved, proving: Minimum of 2 years experience working on industrial machinery

- Documented education, high school diploma or global equivalent (copy of degree must be included with your eligibility form) or
- Experience in machinery maintenance and operation verified by employer (Reference letter on company letterhead signed by a manager must be included with your eligibility form)
- Attended complete two-day course
- Passing grade of 75% or higher on the exam

Course Agenda

Day 1

- Understanding the Functional Safety for Machinery Technician Certification (TÜV Rheinland)
- Defining Legal Guidelines and Standards
- Defining Risk Analysis and Processes (ISO 12100:2010)
- Defining Basic Electrical Safety Principles (IEC 60204-1)
- Defining Basic Safety Principles
- Defining Machine Guarding Principles

Day 2

- Identifying Safety Functions
- Identifying Safety Devices
- Identifying Circuits, Schematics, and Examples
- Defining New Standards Regarding Safety of Machinery
- Evaluating Machine Safety Using a Practical Example
- Exam (1 hour)