



Safety Instrumented Systems (SIS) Training for Oil and Gas

Kuala Lumpur -

02-12-2024



# Safety Instrumented Systems (SIS) Training for Oil and Gas

Course code: SC217 From: 02-12-2024 Venue: Kuala Lumpur - Course Fees: 4445 £

#### Introduction

Safety Instrumented Systems (SIS) play a critical role in the oil and gas industry by safeguarding personnel, assets, and the environment. This training program is designed to provide participants with a deep understanding of SIS principles and practices. Participants will learn to design, implement, and maintain effective SIS, contributing to enhanced safety and compliance within their organizations.

## Course Objectives of Safety Instrumented Systems

## Upon completing this program, participants will be able to:

- Understand the importance of Safety Instrumented Systems (SIS) in oil and gas operations.
- · Identify and explain key components of SIS.
- Design, implement, and maintain SIS effectively.
- Comprehend the role of SIS in risk reduction and process safety.
- Ensure compliance with industry standards and regulations related to SIS.
- Troubleshoot and address common SIS issues.

## Course Methodology of Safety Instrumented Systems

## This program will employ a combination of engaging learning methods, including:

- Lectures and Expert Insights: Leading industry experts will share their insights and best practices.
- Case Studies: Analyze real-world talent acquisition challenges and solutions.
- Group Discussions: Engage in meaningful discussions and share experiences with peers.
- Role-Playing and Simulations: Practice scenarios to enhance skills.

# Organizational Impact of Safety Instrumented Systems

## This training program will have a positive impact on organizations by:

- Improved safety measures through effective SIS implementation.
- · Reduced risks associated with process-related incidents.
- Enhanced compliance with safety standards and regulations.
- Greater confidence in handling SIS-related tasks.
- Increased operational reliability and uptime.

# Personal Impact of Safety Instrumented Systems

#### Participants will experience personal growth and development, including:

- In-depth knowledge and expertise in Safety Instrumented Systems.
- Enhanced ability to contribute to process safety within the organization.
- Improved career prospects in safety and instrumentation roles.



- Increased confidence in designing, implementing, and maintaining SIS.
- Greater awareness of safety best practices in the oil and gas sector.

#### Who Should Attend

## This training program is ideal for:

- Safety Engineers and Managers
- Instrumentation and Control Engineers
- Process Engineers
- Maintenance Personnel
- HSE (Health, Safety, and Environment) Professionals
- Anyone involved in safety-related roles within the oil and gas industry.

#### Course Outline

## Day 1

## Introduction to Safety Instrumented Systems (SIS)

- Importance of SIS in Oil and Gas
- SIS Components and Architecture
- SIS Standards and Regulations

## Day 2

## SIS Design and Implementation

- · Hazard and Risk Assessment
- SIS Lifecycle Phases
- SIL (Safety Integrity Level) Determination

## Day 3

## SIS Implementation and Testing

- SIS Design and Configuration
- · SIS Testing and Verification
- · Documentation and Records

#### Day 4

## SIS Maintenance and Management

- SIS Maintenance Strategies
- Management of Change (MOC) for SIS
- SIS Auditing and Compliance

#### Day 5

## SIS Troubleshooting and Case Studies



- Common SIS Issues and Solutions
- Real-world SIS Case Studies
- Course Review