



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

*Barcelona (Spain) -*

*13-07-2026*

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

Course code: SC217 From: 13-07-2026 Venue: Barcelona (Spain) - Course Fees: 5000 £

## 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