TRAINING COURSES

SIL awareness for control / electrical technicians

A practical course for understanding the derivation and operational requirements for Safety Instrumented Systems (SIS) in accordance with IEC 61508 / 61511.

26th September 2019 - Teesside, ABB Office
Are your control / electrical engineering teams aware of the requirements of IEC 61508 / 61511 compliance for the trips and alarms installed within your asset?

With the advent of the IEC 61508 / 61511 standards there are best practice requirements for the specification, installation, inspection, maintenance and repair of Safety Instrumented Systems (SIS) installed within the workplace. ABB will help you to achieve and maintain compliance for your assets. Providing a practical perspective based on real life experience comes naturally.

**Benefits**
The course will provide you with a clear understanding of the best practice requirements for SIS operating as part of your plant’s layers of protection.

**Who should attend?**
The course has been designed to be of benefit to control / electrical technicians and supervisory staff. It will also provide other engineering disciplines with an overview of the requirements for managing SIS.

**Price**
£295 + VAT

**Course synopsis**
As part of your overall basis of safety management requirements, an end user operator will be required to provide the facility control / electrical technicians with awareness training in the requirements of SIS maintenance.

This short course is designed to give you an appreciation of the following:

- A brief introduction to the IEC 61508 / 61511 standards and the guidance for operating, maintaining and managing SIS
- An introduction to risk and the concept of Safety Integrity Level (SIL)
- An overview of designing a Safety Instrumented Function (SIF)
- The importance of testing and maintaining SIF
- The need for documentation and records to support the operational basis of safety
**Course leader**
Paul Lucas is a principal safety consultant at ABB with over 35 years’ experience of real-time computing and instrumented safety in the process chemical, oil & gas and pharmaceutical sectors. He designs and delivers ABB’s training courses and seminars on the practical implications for end users, system integrators and instrument technicians in the use of the IEC61511 functional safety standard, on managing Functional Safety and detailed design of safety instrumented functions. In recent years, Paul has completed a Master’s degree in Ergonomics and Human Factors to gain theoretic background in support of many years operational experience in the assessment and analysis of Human Factors in Safety Critical tasks, including Task analysis and Human Error Analysis (HEA).

### Agenda*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08.30</td>
<td>Registration, coffee and bacon rolls</td>
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<tr>
<td>09.00</td>
<td>Introduction</td>
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| 09.05 | Why do we need Safety Instrumented Systems (SIS)?  
Functional safety standards - IEC 61508 & IEC 61511  
Risk and risk reduction  
Designing a safety instrumented function |
| 10.30 | Coffee |
| 10.45 | The importance of testing and maintaining safety instrumented functions  
Recording, reviewing and improving  
Quiz (Clarification of learning)  
Questions |
| 12.00 | Close |

*ABB reserve the right to amend the agenda.

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**How to book**

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