

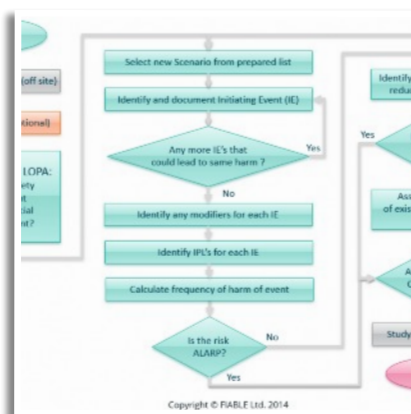
SIL Studies with LoPA

This course has been fully updated to comply with **BS EN 61511 edition 2:2017**.

A course aimed at all personnel who participate in Safety Integrity Level (SIL) studies following HAZOP or other process hazard analysis studies.

End users in the process industry sector have ongoing obligations in the operation, maintenance and modification phases of the SIS safety lifecycle to carry out SIL studies. This course outlines the background to SIL and presents the popular options for conducting SIL studies.

The course outlines the whole SIS safety lifecycle, and then focuses participants on the latest requirements for selection or determination of SIL using the Layer of Protection Analysis (LoPA) technique.



Latest Guidance

- BPCS (Basic Process Control System) layer rules according to BS EN 61511 edition 2:2017.
- CCPS (Center for Chemical Process Safety) 2014 guidance on enabling conditions and conditional modifiers in LoPA.
- CCPS (Center for Chemical Process Safety) 2015 guidance on initiating events and independent protection layers in LoPA.

Venue

On-site or hosted at
CB1 Business Centre,
Cambridge, UK. CB1 2JD.

Duration

2 working days.

Provided Materials

Printed Course Notes.

Course Code
eFF-LoPA

Fundamentals

An overview of the full SIS safety lifecycle according to BS EN 61511 edition 2: 2017

HAZOP review

The fundamentals of reviewing HAZOP reports for scenarios of further study.

Risk Matrices

The use of risk matrices during HAZOP as a screening tool prior to conducting LoPA on highest consequence scenarios.

LoPA

Layer of Protection Analysis with practical worked examples of how to determine a SIL band or calculate a Risk Reduction Factor.

ALARP

The concept of As Low as is Reasonably Practicable, and how to demonstrate that tolerable risk has been reached.