

LoPA Participant

LAYER OF PROTECTION ANALYSIS FOR PROCESS OPERATIONS



Online Self-Paced Training Course



Layer of Protection Analysis

For process operations personnel

Target Disciplines - LoPA Teams

- Process safety professionals
- Process engineers
- Process operators
- Instrument technicians and maintenance personnel
- Electrical, control and instrumentation engineers
- LoPA scribes

Learning Outcomes

Learn the latest process risk analysis technique for correctly identifying and crediting protection layers & determine SIL targets.

Outline different LoPA methods and their possible challenges.

Understand event frequency and probability for LoPA purposes.

Correctly identify initiating events from PHA/HAZOP records and P&ID's.

Outline common conditional modifiers and their correct use.

Learn typical initiating events and their common frequencies of failure.

Source data for independent protection layers and typical probabilities of failure.

Learn the many pitfalls of incorrectly applying the LoPA technique.

Learn the critical aspects of reviewing Layer Of Protection Analysis (LoPA) studies for operations purposes.



“The LoPA course is extensive enough to replace a full day's training on the subject, which is great if teams are inexperienced with the technique.”

Lesson Module	Duration (minutes)
Author's message, instructions & introduction	5
LoPA introductory outline	20
Key terminology	30
SIS Safety life-cycle	30
Process Hazards Analysis overview	20
Protection Layer Analysis and SIL determination overview	20
LoPA Study preparation	20
Consequence analysis for LoPA	20
LoPA scenario selection from PHA / HAZOP	20
Exercise 1	30
Determining Initiating Event Frequencies	20
Exercise 2	30
Independent Protection Layers	30
Exercise 3	30
Enablers and conditional modifiers	20
Determining scenario frequency, risk gap and SIL	20
Exercise 4 - Complete LoPA	60
Approximate Completion Time	7 hours

“ This format is the most practical, cost-effective and long-term deliverable way of training managers and teams who do not need to become full-time experts, but who do need to know the big picture about reducing risk.”

Learn and track your progress

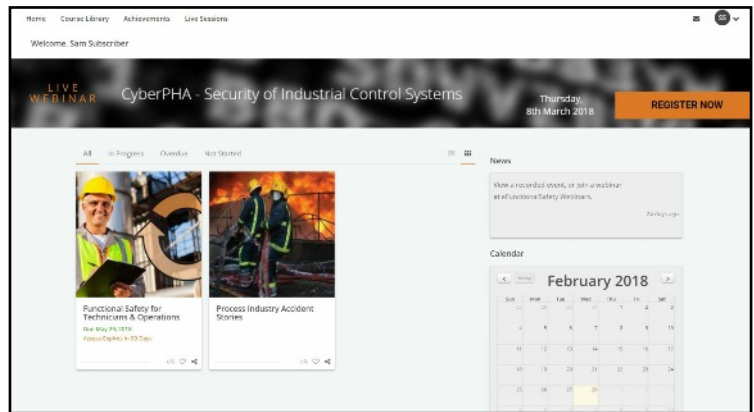
Single users, teams or organisations without a Learning Management System (LMS) access courses on our professionally hosted LMS which is available 24/7. We take care of initial on-boarding of new users and provide certificates on course completion. If you wish to nominate someone to monitor and report on individual user progress that's no problem. We can provide administrator access and basic training on how to run reports,

There is no special software required. All users can access courses using a standard web browser.

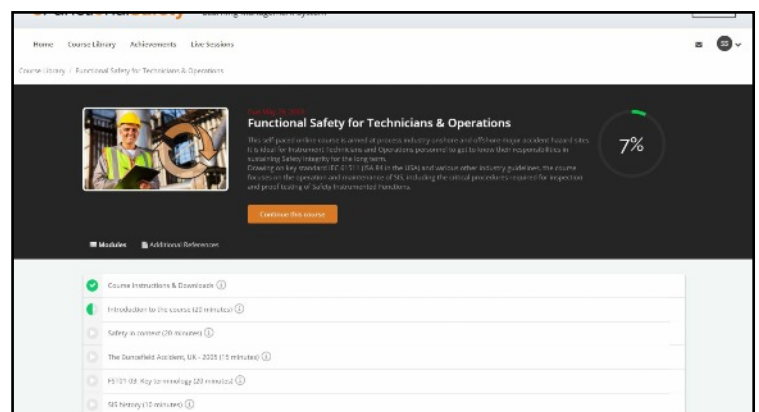
Modules in the courses are a mixture of text, interactive slides, video, quizzes and downloadable fact sheets. The entire course is narrated in English language (other languages available on request).

Subscribers to our LMS are provided with a unique username and password. Users can pick up and return to a course at any time within their subscription period, with their course position and results progress saved in our system.

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eFunctionalSafety course Dashboard



eFunctionalSafety Learning Management System progress tracking

Corporate LMS Option

Larger organisations who have their own corporate Learning Management System (LMS) can license our courses for a subscription period (minimum 2 year contract) for a set number of users, or unlimited users if required.

We provide LMS compliant files including SCORM 1.2, 2004, AICC or xAPI (Tin Can) and all popular digital video formats.



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