



CEUs: 3.2

Overview

In this 4 day course, Kenexis provides the users of Safety Instrumented Systems (SIS) with training required to cost-effectively implement systems that are highly reliable, easy to use, and ideally suited for their applications. This course presents core principals of Safety Instrumented Systems Engineering and is taught by engineers who have years of practical experience in the design of safety systems. Part 1 spans two days and covers the first half of the Safety Lifecycle. Key topics include identifying the Safety Instrumented Functions (SIF), specifying a Safety Integrity Level (SIL) for those functions, and writing Safety Requirements Specifications. Part 2 spans two days and covers the second half of the Safety Lifecycle. Key topics include working with failure data, performing reliability calculations to determine SIL achieved, incorporating the effect of diagnostics, understanding the relationship between testing and SIL, and reviewing safety equipment technology and architectures. In conjunction with relevant work experience, these courses could be used to prepare for 3rd party certification exams such as those offered by ISA, TUV, and CFSE.

Part 1**

1. Introduction / Overview
2. Lessons Learned from Process Plant Accidents
3. The Safety Lifecycle
4. Principals of Risk Management
5. Process Hazards Analysis
6. SIF Identification
7. SIL Selection
8. Safety Requirements Specifications

Part 2

1. Introduction—Example Problem
2. Working with Failure Statistics
3. Basic Reliability Engineering
4. Calculating Probability of Failure on Demand (SIL)
5. Advanced Failure Rate Analysis (FMEDA, Confidence Intervals)
6. Fault Tolerant Architectures
7. Effects of Maintenance and Testing
8. Equipment Selection and Installation Considerations
9. Safety Requirements Specifications

Course Date: Dec 14 - 17, 2009

Price: \$2100**

Course Location: Lakeside Process Controls Ltd
5250 Orbitor Drive
Mississauga, Ontario L4W 5G7

Training Provided By: Kenexis Consulting ULC

To Enroll or for More Info Contact: Munira Kitabi
Phone: 905-629-9340
Email: munira.kitabi@lakesidecontrols.com

REGISTRATION IS LIMITED - FIRST COME, FIRST SERVED

*** Depending on enrollment, Part 1 only is available for \$1100.*

Kenexis Consulting ULC.

Phone: (780) 628-2699

Email: info@kenexis.com

Web: www.kenexis.com

