Duration: 2 Day
Time: 8:00 am – 4:00 pm UTC -4
Date: See online store
Location: Microsoft Teams
Cost: $1,600 USD / Student

Fundamentals Training

SIS101: Introduction to Safety Instrumented Systems

Course Outline

This course will cover introduction to fundamentals associated with the design and testing of Safety Instrumented Systems. Topics covered will include:

- Introduction to IEC 61511 safety-lifecycle phases: from hazard analysis to decommissioning
- SIL Selection – What's an IPL? What's a good SIF definition? What's a SIL?
- SIL Verification Calculations - Which parameters most impact results?
- Failure Rate Data – Where to find it? Certified vs Prior Use?
- Safety Requirements Specification (SRS) – What's required?
- Proof Testing - What's a good test plan? How to conduct Test Interval Optimization?
- Concepts will be emphasized through a combination of PowerPoint slides with live instructor feedback
- All students will get **hands on experience** in completing SIL Calculations, SRS, C&Es and Proof Test Plans
- Focus will be on real world applications and making **Functional Safety Simple**

Instructor – Mike Scott – PE, CFSE

CEO of aeShield which has developed a patented digital process / functional safety lifecycle enterprise software offering deployed in 283+ facilities across 42 countries. He has over 30 years of process / functional safety and I&C experience including risk analysis, safety instrumented systems and control systems engineering, where he performed / implemented conceptual design, detailed design, configuration, and startup / commissioning exercises for the process industry.

· Co-Chairman of the ISA S84 Committee
· IEC 61511 committee member
· Granted 7 patents on safety lifecycle tools and implementation
· ISA Fellow