LOPA Training UAE

Service Objectives

- Structure and execute defensible LOPA aligned to IEC 61511/ISA 84 and CCPS methodology.
- Integrate HAZOP findings into quantified, auditable risk decisions and target SIL determinations.
- Quantify and defend frequencies, enabling conditions, and conditional modifiers with traceable data.
- Evaluate IPL effectiveness, independence, common cause failures, diagnostics, and proof-test coverage.
- Align risk reduction and target SIL with corporate risk matrices and tolerability criteria.
- Document LOPA worksheets with auditable assumptions, citations, and clear action registers; integrate with SIS lifecycle, alarm management, and procedures.

> UAE-aligned delivery: methodology and examples tailored to OSHAD expectations, ADNOC standards, Dubai Municipality/Dubai Civil Defence codes, and free zone requirements; available on-site nationwide or virtually.

Who This Service Is For

- Process and control/instrumentation engineers; project and commissioning teams transitioning from HAZID/HAZOP to SIL.
- HSE specialists, risk managers, and internal auditors documenting ALARP justifications and submissions.
- Operations supervisors and leaders accountable for acceptance of residual risk at unit/plant level.
- Asset integrity, maintenance, and reliability teams validating proof-test intervals and diagnostics.
- HAZOP facilitators, SIL/functional safety engineers, and MOC approvers seeking foundational or advanced refreshers.
- UAE-based facilities across oil and gas, petrochemicals, LNG, utilities, and manufacturing; industry pathways available for Oil & Gas, Petrochemical Plants, and LNG Facilities.

Duration & Process Overview

- Two-day practitioner programme (12–14 hours) for participants and facilitators.
- Three-day advanced programme (18–21 hours) with expanded exercises, alarm management interfaces, and deeper human reliability.
- Half-day executive awareness can be combined with either track.
- Delivery on-site across the Emirates or virtual; typical cohort size 8–16; includes pre-training scoping, customised examples, digital workbooks, and post-training Q&A; staggered cohorts available for multi-site teams.

Methodology

Modular programme blending concise instruction with hands-on case studies from UAE operations. Content and sequencing are adapted following a pre-training scoping call to align with your assets and standards.

Phase	Objective	Exercise / Duration
Foundations of LOPA	Risk matrices, tolerability, initiating events, enabling conditions, conditional modifiers.	Guided worksheet build — 3h; CCPS LOPA, IEC 61511.
IPL Qualification	Effectiveness, independence, diagnostics, proof testing, human factors.	Case analysis & critique — 3h; IEC 61511, ISA TR84.
From HAZOP to LOPA	Screen deviations, assess consequence severity, derive event frequencies.	Group scenario mapping — 3h; IEC 61882, CCPS.
SIL Target Setting	Calculate RRFs, select SIL, allocate SIFs, document decisions.	Hands-on SIL calculation — 2h; IEC 61511.
Defensibility & Audit	Assumption traceability, citations, management review and peer challenge.	Peer review workshop — 2h; corporate standards.

> Assessment & certification: graded exercises building a complete LOPA scenario, capstone “management review” presentation, and NPM certificate of completion. Client organisations retain final competency sign-off.