



TECHNICAL SAFETY TRAINING

ZARZIS SMART CENTER

ADEPP Digital & Training offers a range of training and expert support services, all designed to help your projects reach its PSM, integrity, HSE and Quality objectives. Our research and development team created ADEPP Digital, an open source database by Microsoft SharePoint to make the good communication and training workspaces for all involved parties of hazardous projects. ADEPP was assessed and found conforming to the requirements of the regulations of ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 21001:2018 and ISO 56002:2019.

TRAINING PROGRAM



CONTACT US

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LINK TO EVENT



www.adepp.online



RISK & SAFETY TRAINING BY DIGITAL TWIN AND COACHING

DAY1

What you'll learn:

- ADEPP Process Safety Training workspaces
- ADEPP Safety Engineering Workspaces
- ADEPP HSE MS Workspaces
- Virtual reality for 3D displays
- Applications of virtual reality (VR) for HSE training



Description

Digital Twin of the following installations with Fire zones, simulations & E-Courses will be shown:

- Digital Twin of onshore installations
- Digital Twin of Offshore installations
- Digital Twin of FPSO
- Digital Twin of Pipelines
- Digital Twin of Drilling

Who this course is for:

Safety Engineers, Process Safety Engineers, HSE Engineers, , Engineering Manager, Technical Authorities and Lead Engineers who will participate in HAZOP, SIL and LOPA workshops





HAZOP, SIL, LOPA AND FUNCTIONAL SAFETY

DAY 2

What you'll learn:

- HAZOP Methodology
- SIL Allocation by risk graph (IEC 61508)
- SIL Allocation by LOPA
- SIL Verification
- Functional Safety (IEC 61511-1)



Description

This Course covers the methodology, procedure and terms of reference for conducting HAZOP, SIL, LOPA AND FUNCTIONAL SAFETY for a project.

HAZOP is a study technique employed as part of the project audit system in order to identify the potential hazards and operability problems that may be inherent in the process design. HAZOP, SIL allocation are a structured hazard identification and integrity tools using a multi-disciplined team and they have become accepted as the main technique for the identification of process hazards and safety integrity in the design and operation of a facility. They allow the project team to further develop an understanding of the matters that need to be addressed as part of managing HSE in a project.

This Couse should be used to ensure a common understanding by all parties prior to commencement of the HAZOP and SIL assessment.

The objectives of the **HAZOP**, **SIL**, **LOPA AND FUNCTIONAL SAFETY** are to:

- Ensure that the facilities are operated safely and efficiently
- Identify any potential hazards
- Provide a checklist of actions which must be progressed by the project team to address identified hazards.

Who this course is for:

Safety Engineers, Process Safety Engineers, HSE Engineers, , Engineering Manager, Technical Authorities and Lead Engineers who will participate in HAZOP, SIL and LOPA workshops



HAZID, FIRE, EXPLOSION, RISK & HSE CASE

DAY 3

What you'll learn:

- HAZID (Hazard Identification study)
- Definition of Scenarios & Isolatable Sections
- Fire, Explosion and Gas dispersion study
- Simultaneous Operations (SIMOPS) hazards
- Risk Assessment (PRA, DRA, QRA, RRW)
- ALARP Demonstration
- HSE Case development



Description

The objective of this Course is:

- Compliance with all applicable Health, Safety and Environmental for development of HSE case
- Identify all potential hazards and assess their consequences and probabilities
- Develop prevention, control and mitigation measures to eliminate or minimize hazards to people, asset and environment
- Minimize the risk associated with operation of the plant by reducing risk to a level which is "As Low As Reasonably Practicable" in compliance with project risk acceptance criteria
- The Following subjects will be discussed:
- HAZID methodology and Terms of Reference as an input to Risk Assessment
- Failure cases definition' which shall identify isolatable process sections based on ESDVs, SDVs.
- Fire & Explosion consequence modelling
- Preliminary Risk Assessment (PRA) based on COMPANY Risk Matrix
- Detailed Risk Assessment (DRA) Based on COMPANY Risk matrix
- Quantitative Risk Assessment (QRA) to define IRRA and PLL and FN curves
- Risk Reduction Workshop (RRW)
- ALARP demonstration
- HSE Case development
- SIMOP hazard identification

Who this course is for:

HSE Design Enginers, Safety Engineers, Process safety Engineers, HSE managers, discipline Engineers, Engineer Managers, Technical Authorities and Operation Managers



FUNDAMENTAL OF SAFETY ENGINEERING

DAY 4

What you'll learn:

- Safety Concept
- Active & Passive Fire protection
- Fire & Gas detection
- Layout main principles
- Hazardous area classification
- Open & Closed drain system

Fundamental of Safety Engineering Preview this course

Description

The purpose of this Course is to describe the systems, equipment necessary to protect against the major hazards which could lead to injury to personnel, damage to facilities, loss of production or pollution of the environment, and to prescribe the safety measures which are adopted in the design in order to:

- Avoid exposure to potential hazards,
- Minimize / control the risk of ignition,
- Contain and minimize the consequence (fire, explosion and pollution) of the hazards and ensure adequate emergency response facilities are provided,
- Provide means of escape and evacuation from such hazards,
- Ensure the installation is designed to a safe standard for all foreseeable hazards,
- Provide a safe working environment for personnel,
- Ensure that the environment is adequately protected from harm.

The different levels of protection will be discussed as follows:

Primary Protection – Detection, alarm and control of potential process hazards shall be achieved by the process control systems.

Secondary Protection – Additional protection provided shall be independent of the primary protection system and may typically include protection against overpressure by PSV's.

Emergency Protection Systems – Fire and gas detection, emergency shutdown and emergency depressurisation systems are designed to bring under control hazards in case the process control system has failed to detect or prevent such situation.

Who this course is for:

Safety Engineers, Process safety Engineers, Plant managers, Safety supervisors, Process Engineers, and discipline Engineers.

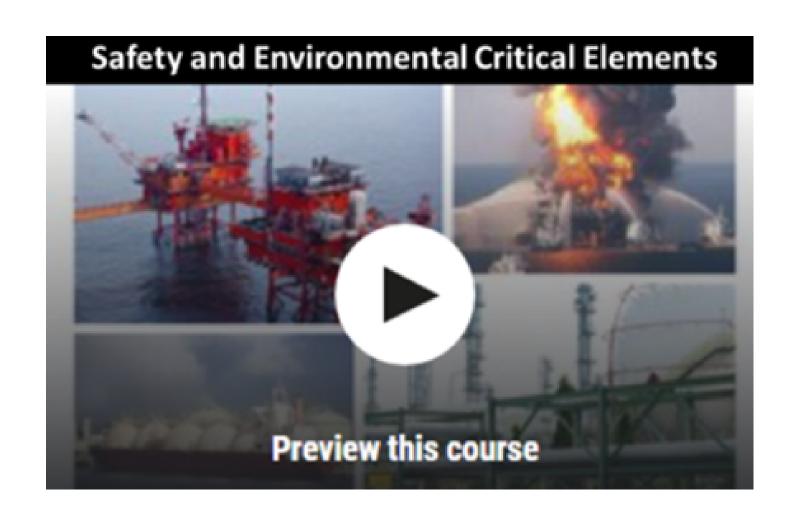


SAFETY AND ENVIRONMENTAL CRITICAL ELEMENTS (SCE)

DAY 5

What you'll learn:

- SCE Identification
- SCE Register
- Bow-Tie Analysis
- Evaluation of SCE Criticality
- Establish SCE Performance Standards
- SCE Operations Integrity Assurance
- SCE Verification Scheme



Description

This Course defines how Safety and Environmental Critical Elements (SCE) are identified and the methodology for Performance Standards development to ensure that SCEs are suitable for their required function and maintained in a condition so that they will continue to perform their required function.

The objectives are as follows:

- To comply with the international regulations about the Safety and Environment Critical Elements management
- Capture best practice in the preparation performance standards;
- To contribute to the Technical Integrity assurance process whereby SCEs identified through scenario-based risk assessment

A key part of SCE Integrity Management is the identification and management of Safety Critical Barriers (SCB). Bow-Tie analysis is required to identify the barriers protecting the personnel and assets from a major hazardous event. Operators will then focus efforts on identifying credible major accident hazards and then identifying SCEs which will prevent, control, mitigate and facilitate the safe evacuation from the identified hazards.

Because of the essential role of SCEs, assurance activities (maintenance, inspection and testing) must be put in place to continuously demonstrate that they remain fit for purpose during the whole life of the installations

Who this course is for:

HSE Design Engineers, Safety Engineers, Process safety Engineers, HSE managers, discipline Engineers, Engineer Managers, Technical Authorities, Integrity Managers and Operation Managers



RESUME OF FREDERIC SALIMI



Over twenty years of Safety engineering, design of petrochemical, oil and gas industries both onshore and offshore. Experience includes process safety and integrity management, Risk Base Design for EPC projects. Expertise also includes Safety & Environment code and standard compliance, HAZID, HAZOP, SIL, LOPA, QRA, BOW-TIE, Risk & Opportunity identification, ALARP Demonstration and Risk Reduction, HSE Case development, Critical system identification and SCE performance standard development.

Experience	Lead Safety Engineer of several major Oil& Gas Projects in TOTAL, TECHNIP, SAIPEM, ENI, Etc.
Qualification	-Quantitative Risk Assessment (QRA) Training Course in DNV TECHNICA UKDependability (Safety, Reliability, Maintainability, Availability) and Prevention of Major Technological Risk (MSc.), Ecole Centrale de Paris, France Major Master Courses were as follows: Probability & Statistics Risk analysis, HAZOP study Consequence analysis (theoretical calculations and the choice of proper models in dispersion, explosion, fire) Fault tree analysis Failure modes, effect and critically analysis (FMECA) Event tree analysis, Cause-consequence analysis Fire protection, Risk management Industrial Process Control and Instrumentation (B.Sc.) Créteil Technological InstitutApplied Physics (B.Sc.) Pahlavi International University.
Affiliations Memberships	International WHO's WHO of Professionals
Language	The Couse will be conducted in English. However the discussion can be in French or Farsi if the company request.



COST

	Euro/person	Certificate Type
One week training in Smart Canter in Zarzis (Luch and Transport from hotel is included)	950	Knowledge Certificate
3 Months Coaching with customised Training as per installation Safety Concept (Optional)	1400	Skill Certificate
Hotel (Will be booked by ADEPP: Breakfast and dinner included)+ Trasport (Transport from Djerba Airport to the hotel and from the hotel to Zarzis Smart Center)	1350	_
TOTAL	3700	_

To note!

Note1: Air Ticket will be Purchased by ADEPP Digital & Training at cost Note 2: 5% Discount for companies with more than 10 trainees

