

Safe Systems of Work in Gas Operations

Course Outline:

Day 1: Health, Safety and Environmental Management.

- Process Safety Management (PSM)
- Learning from incidents
- Hazards inherent in oil and gas
- Risk management techniques used in the oil and gas industries
- Work permit systems
- Safety Reports

Day 2: Process Safety & standards

- Mechanics of failure
- Safe containment of hydrocarbons
- Plant operation and maintenance
- Start-up and shut down
- Fire hazards
- Work in gas hazards and standards

Day 3: Risk Assessment Techniques

- Framework for risk assessment
- Hazard and Operability Study 'HAZOP'
- The Bow-tie model
- Inherent Safer design
- Safety Integrity Level 'SIL'
- Hazardous Area Classification

Day 4: Fires, Explosions and Emergency Response

- Fire and explosion in the oil and gas industries
- Types of fire & explosions
- Fire and explosion risk analysis
- Fire and explosion protective systems
- Emergency Plans and response

Day 5:

- Recent technologies in safe workplaces
- Best practices
- Incident's prediction tools
- Usage of AI in safety

Location	Cairo, Dubai
Start Date	10 Aug 2025
End Date	14 Aug 2025