



PHA/HAZOP Leader Course

Course Description:

PHA is a systematic multidisciplinary team study intended to identify and analyze the significance of potential process hazards and make initial recommendations for eliminating hazards, for reducing the consequences of potential accidents and for improving general facility safety.

PHA methods are used for new plants as well as for modifications to an existing design. The methods have been developed primarily for the processing industry and have been applied in great scale in the Oil and Gas sector. However, the PHA techniques are now applied with success for other industries such as offshore construction, power and water projects, space and military industries, and environmental studies.

Course Objective

By attending this course, you will learn

- To build an understanding of the concepts of Process Hazards Analysis (PHA) and its role in Health, Safety and Environment management.
- To provide a basic understanding of all the major hazard identification techniques and when each should be used.
- To provide an understanding of the responsibilities involved in PHA leadership.
- To provide basic skills and practice in the use of the What-If and HAZOP techniques

Course Certificate

Certificate will be issued to all attendees completing minimum of 80% of the total tuition hours of the course.

Who should attend?

This program provides an overview of all significant aspects and considerations of PHA for those who are involved in management, engineering (design, process, chemical, facilities, instrumentation, and control), operations and safety of process operations. Engineers, safety/environment personnel, plant operators, area managers, projects and maintenance personnel will benefit from the practical approach presented in this program.

Training Methodology

This is an interactive course. There will be open question and answer sessions, regular group exercises and activities, videos, case studies, and presentations on best practice. Participants will have the opportunity to share with the facilitator and other participants what works well and not so well for them, as well as work on issues from their own organizations. The online course is conducted online using any online program

Course Outline

1. Day 1

- Safety moment
- Hazard Identification
- Risk Terminology
- Overview/History of PHA
- Human factors
- PHA Teams

2. Day 2

- Basics of HAZOP
- HAZOP Teams
- HAZOP Approach
- Checklist for HAZOP Leader

3. Day 3

- HAZOP TOR/CHARTER
- Node selection
- HAZOP Methodology
- Deviations/Guidewords
- REHAZOP

4. Day 4

- What if analysis
- Checklists
- What if/checklist combinations
- Introduction to LOPA
- HAZOP/LOPA Technique

5. Day 5

- PHA Leadership skills
- HAZOP Leader rules
- HAZID Vs HAZOP
- Limitation of PHA techniques