Global Horizon
TRAINING CENTER

Training Course:
Advanced Process HAZOP

20 - 24 July 2026
Rome (Italy)

Training Course:
Advanced Process HAZOP

Training Course code: LS32456 From: 20 - 24 July 2026 Venue: Rome (Italy) - Training Course Fees: 6050 Euro

Introduction

In today's high-risk industrial environments, organizations must adopt proactive and systematic approaches to risk management to ensure operational safety, environmental protection, and business continuity. Process Hazard Analysis PHA plays a critical role in identifying, evaluating, and controlling risks associated with hazardous processes and operations.

Hazard and Operability HAZOP studies are internationally recognized as one of the most effective qualitative risk assessment methodologies used across process industries, including oil and gas, petrochemicals, power generation, and manufacturing. Effective HAZOP implementation supports organizations in minimizing operational risks, improving process safety, and strengthening regulatory compliance.

The Advanced Process HAZOP program is designed to provide participants with advanced knowledge and practical skills in process hazard analysis, HAZOP methodologies, consequence analysis, risk assessment techniques, and HAZOP facilitation. The course combines theoretical concepts with practical applications, enabling participants to confidently lead and participate in advanced HAZOP studies and process safety initiatives.

Course Objectives

By the end of this training program, participants will be able to:

- Understand the principles of risk assessment and risk management.
- Apply qualitative, semi-quantitative, and quantitative risk assessment techniques.
- Conduct hazard identification and process hazard analysis studies.
- Understand and apply HAZOP study methodologies effectively.
- Facilitate and participate in HAZOP workshops confidently.
- Analyze process deviations, causes, consequences, and safeguards.
- Apply Fault Tree Analysis FTA and Event Tree Analysis ETA techniques.
- Understand fire, explosion, toxic release, and dispersion modeling concepts.
- Utilize Quantified Risk Assessment QRA principles and methodologies.
- Improve process safety performance and operational risk management.

Target Audience

- HSE and Process Safety Professionals
- Process and Chemical Engineers
- Project and Design Engineers
- Maintenance and Reliability Personnel

- Instrumentation and Control Engineers
- Operations and Production Personnel
- Risk Assessment and Compliance Professionals
- HAZOP Team Leaders and Facilitators
- Professionals Involved in Process Design and Modification

5-Day Training Outline

Day 1: Fundamentals of Risk Assessment and Risk Management

- Introduction to process safety and risk management
- Concepts of hazards, risks, and risk assessment
- Risk evaluation methodologies
- Integrating risk assessment within risk management systems
- Qualitative, semi-quantitative, and quantitative risk assessment techniques
- Risk assessment frameworks and best practices
- Review and discussion sessions

Day 2: HAZOP Methodology and Hazard Identification

- Introduction to hazard identification techniques
- HAZOP methodology and applications
- Guide words and process variables
- Team composition and HAZOP roles
- Requirements for successful HAZOP studies
- Practical HAZOP exercises and case studies
- Workshop review and group discussions

Day 3: HAZOP Facilitation and Leadership

- Roles and responsibilities of HAZOP facilitators and scribes
- Leadership and communication skills for HAZOP studies
- Best practices for facilitating HAZOP sessions
- Managing HAZOP documentation and reporting
- Information requirements for effective HAZOP reviews
- Management of Change MOC integration
- HAZOP software tools and applications
- Practical facilitation exercises

Day 4: Consequence Analysis and Process Safety Modeling

- Introduction to consequence analysis
- Fire, explosion, and toxic dispersion modeling concepts
- Effects of fires and explosions on personnel and equipment
- Quantitative consequence analysis techniques
- Process safety software applications
- Evaluating hazardous scenarios and impacts
- Practical examples and modeling exercises

Day 5: Quantified Risk Assessment QRA and Advanced Analysis

- Fundamentals of Quantified Risk Assessment QRA
- Event Tree Analysis ETA
- Fault Tree Analysis FTA
- Multi-causation and scenario analysis
- Failure data and reliability considerations
- Individual and societal risk concepts
- QRA software and practical applications
- Final review, discussion, and action planning

Registration form on the Training Course: Advanced Process HAZOP

Training Course code: LS32456 From: 20 - 24 July 2026 Venue: Rome (Italy) - Training Course Fees: 6050 Euro

Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
Official E-Mail: .....

Company Information

Company Name: .....
Address: .....
City / Country: .....

Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....
Position: .....
Telephone / Mobile: .....
Personal E-Mail: .....
Official E-Mail: .....

Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

Easy Ways To Register

Telephone: +201095004484 to provisionally reserve your place.	Fax your completed registration form to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.