

Process Hazard Analysis (PHA)

Purpose

Comprehensive hazard identification is the cornerstone of effective risk management. This course covers practical methods for performing process hazard analyses (PHAs) of systems and procedures, using the hazard and operability (HAZOP) and what-if/checklist techniques. It teaches participants the methods used to identify hazard potential and their consequences when plant/equipment operates outside its design intent.

At the end of the course you will be able to

1. Select the most appropriate technique for the PHA
2. Apply PHA techniques to identify hazards, clearly define the consequences and challenge the suitability of the safeguards
3. Report and document the findings from the PHA

Outline content

- Process safety management and risk assessment concepts
- Using the risk ranking matrix
- What-if/checklist technique
- HAZOP technique
- Difference between HAZOP / what-if? / checklist and how to choose the appropriate methodology
- Analysis preparation, meetings, documentation and follow-up
- Understand how the LOPA technique can assist in the determination of the suitability of safeguards
- Common failings in PHAs
- Human factors concepts
- PHA for analysing procedures and batch processes
- Roles and responsibilities of team and team members
- What comprises a good recommendation?
- PHA revalidation
- Certification examination (optional)

Recommended prior study or pre-requisites

Education, skills or experience equivalent to undergraduate level

Who should attend

Project Managers, Operation Managers, Process Engineers, Operators, HSE advisors and risk management practitioners.

Delivery Methods

Face-to-face, Distance Learning, or Blended Learning

Levels of Assessment

- Attendance only
- Assessment by Risktec
- Postgraduate Qualifications: PgCert, PgDip and MSc

Assessment details

Postgraduate programmes: activities and assignment (total about 80 hours)

Module Details

Level: Masters
Duration: 2 days (F2F), or
8 weeks (Postgraduate DL)

Price

For prices and further information, or to book a course, please contact training@risktec.tuv.com

Contact

Tel +44 1925 611 200
training@risktec.tuv.com
risktec.tuv.com