

Introduction to Process Hazard and Risk Analysis (PHRA)

This course presents a practical based introduction to the broad subject of Process Hazard Identification and Risk Assessment. It commences with an introduction to Risk Management Principles and the ALARP concept. It then provides an introduction to the primary hazard identification and analysis tool, used in the process industry, HAZOP and the Semi-Quantitative Layer of Protection Analysis (LOPA) tool used for the analysis of protection layers, including it application for the identification of SIFs and SIL allocations.

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Upskill yourself with our highly engaging online eLearning courses. eLearning courses may be split into few sessions.

Course Contents

Introduction/Basics

- Provides an introduction to the Risk Management Principles, Framework and Process
- Includes basic risk concepts and terminology Corporate Risk Matrix & Risk Tolerability Criteria
- The Concept of ALARP and risk treatment using Safety Instrumented Functions

Hazard Identification and Risk Analysis Techniques

Introduction, working knowledge and application of the HAZOP Technique

Semi-Quantitative Layer of Protection Analysis

- Introduction to developing/identifying: Accident Scenarios, Initiating Events, Enabling Conditions, Conditional Modifiers, Frequencies of unmitigated consequences, IPLs, PFDs, Frequencies of mitigated consequences
- Treatment of an IPL that is a SIF and Calculation of SIL

Process Safety Management System and Functional Safety Life Cycle

- Contextualizing were Process Risk
 Management fits within the Process Safety
 Management System
- Presenting an Overview of the Functional Safety Life Cycle

Dates in 2021

Date Location Country Language

e-Training BENEFITS:

- Reduce travel: attend from home
- LIVE instructor-led training sessions
- Quizzes/live polling
- Interactive course exercises with personal feedback
- Downloadable digital copies of course lessons and other supporting materials
- Certificate of attendance

Participant profile

- Operating staff (plant management, shift supervisors, plant operators, on-site personnel, etc.)
- · Measurement and regulating staff
- Planning staff with no particular focus on functional safety, including:
 - · Process engineering planning
 - · Mechanical construction/installation
 - · Operational implementation

Tailored training

- Course also possible on-site when space and appropriate technical equipment are available (price upon request)
- · Individual course focus possible for closed groups
- eLearning courses may be split into minimum 2 sessions (4 hrs/day)

Further courses on this subject

- Functional Safety Engineer (TÜV Rheinland) (FS 132) 4 days
- Functional Safety for Maintenance & Operation (FS 101) 1 day
- Use of machinery in the process industry (FS 121) 1 day

Duration

1 day / 2 days (4 hrs/day)

Begin: 08:30 am

End: 16:30 pm

Number of participants

- Min. 4 participants
- · Max. 8 participants

Prices for 2021

 For a quotation and detailed course description please contact our Training Center

Services

 Participation certificate issued by HIMA

Registration and Contact

General terms and conditions as well as registration at https://www.hima.com/en/ products-services/seminars/

For any other questions please contact:

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