



FS 151 | Process Hazard and Risk Analysis (PHRA)

Training Facts

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 its application for the identification of SIFs and SIL allocations.

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

FUNCTIONAL SAFETY-TRAINING
FS 151 | Process Hazard & Risk Analysis

Dates in 2020

Date	Location	Country	Language
21.07-23.07.2020	BRISBANE	AUSTRALIA	ENGLISH
20.10-22.10.2020	KUALA LUMPUR	MALAYSIA	ENGLISH
08.12-10.12.2020	PERTH	AUSTRALIA	ENGLISH

Duration

3 days

Begin: 08:30 pm

End: 16:30 pm

Number of participants

- Min. 4 participants
- Max. 8 participants

Prices 2020

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

Services

- Paper copies of training documentation
- Refreshments and lunch
- Participation certificate issued by HIMA

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

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

Registration and Contact

General terms and conditions as well as registration at <https://www.hima.com/en/products-services/seminars/> or using our registration form.

For any other questions please contact:

E-mail:
Training.au@hima.com

HIMA Australia Pty Ltd
Level 4, 182 St Georges Terrace | Perth WA 6000
Phone: +61 (0)8 9323 2100 | Fax: +61 (0)8 9323 2192
E-Mail: Training.au@hima.com