HAZID Overview

HAZID is next generation, knowledge based software which enables you to capture safety and operability knowledge from your experts and apply it consistently across all safety reviews, automatically predicting system-wide cause-consequence scenarios for any plant. This approach means that

- your Safety review teams always has the best knowledge of experts available, even when the experts themselves are not present.
- the hazard identification task is substantially reduced, saving a substantial part of the time and cost of Safety studies.
- knowledge is applied consistently and comprehensively, and results are repeatable and reusable
- the system captures an auditable record of the team’s decision-making
- lessons learned can be incorporated easily into the knowledge base for use in all future reviews or for immediate audit of all facilities

HAZID works by building a model of the plant, analysing the effect of deviations from design intent on the system (more flow, less flow etc) and generating a database of cause-consequence scenarios. This is carried out by the facilitator or assistant prior to the study. The system then assists the review team to assess risks, identify safeguards and assign and manage actions.

Course Outline

This course will prepare you to successfully run a HAZID project from creating the knowledge models to running the plant analysis and reviewing the results. The course will cover the different corporate and project setups needed to produce a HAZID analysis of the plant for both the safety and design reviews. It will also show you how to make best use of the tools available for completing the reviews in a team setting efficiently and comprehensively and how to configure and use automated workflows for the integrated action management system.

Course Duration

10 Days

What you will learn

- How to set up a project within the HAZID system for running of Hazards analysis
- How to input interpret and use the different design checking functions in HAZID
- How to analyse the results produced from the system and to use the various time saving techniques that HAZID has for assessing hazardous scenarios.
- How the intuitive action management system allows more efficient tracking and action closeout.
- How to set up and use your own custom fluids library for use with the hazard analysis and review.
- How to create or edit the corporate safety knowledge base to always hold the most up to date and relevant understanding of your hazards.
Course Content

Day 1 – Project Editor

- Introduction to Project Editor
- Creating a project and importing a drawing
- Setting up the project mappings
- Updating drawings
- Setting up P&ID mappings
- Contextualising the drawing
- Creating test configurations
- Noding the drawings
- Running and analysis

Day 2 – Design Checker

- Introduction to Design checker
- Creating the rules
  - Recommended Safety Devices
  - Safety Analysis Charts
  - SAFE Charts
- Interpreting the rule results

Day 3 - DataView

- Introduction to DataView
- Study SetUp
- Study Creation
- Noding
- Studying a scenario
- LOPA
- Filters and special functions

Day 4 – Action Management

- Introduction to Action Management
- Administrator options
- Configuring the workflows
- Using the Web portal
- Filtering Actions

Day 5 – Fluid Editor

- Introduction to Fluid Editor
- Customisable Fluid templates
- Creating reactivity codes
- Creating Fluids
Day 6 – Model Builder

- Introduction to Model Builder
- Creating corporate mappings
- Importing Symbols
- Creating Global States
- Creating lists for model building
- Creating the model Hierarchy
- Adding Model States to groups
- Creating different model types

Day 7 – Model Builder Cont.

- Overview of the Model Creation environment
- Ports & Propagations
- Causes & Consequences
- Simple model design
- Using States within a model
- Using Runtimes in models
- Creating Expressions for models

Day 8 – Model Builder Cont.

- Creating complex models
- Copying models
- Versioning the library
- Comparing model versions
- Introduction to the Model definition sheet

Day 9 & 10 – Modeling workshop & Questions

- The last two days of the course are for the student to create a model and rules for a piece of equipment which they encounter on a regular basis. These days can also be used to go back through any part of the course which the student feels they need more details on.

More Information

Instructor:
Nathan Arnold is the instructor for this course, he is a consultant for Hazid Technologies and previously worked for a multinational EPC, he holds a Masters in Process Safety. Nathan also leads the model design team, and his other duties include sales and support of global partners.

The course will run Monday to Thursday 8:30am to 4:30pm and Friday 8:30am to 1pm. Breaks will be at 15 mins morning at 11am and 1 hour lunch at 1pm.

The course can be taken as detailed or tailored to suit your individual needs.