

CH157VTL - HAZOP Studies and Other PHA Techniques for Process Safety and Risk Management - Virtual

Day One

10:15 – 10:30

Log into WebEx training center to test connections

10:30 – 10:45

Welcoming remarks

10:45 – 1:00

- Hazard identification
- Incident scenarios, incident sequence

1:00 – 1:30

Lunch break

1:30 – 4:00

- Inherent safety
- Codes, standards, practices
- Layers of protection; preventive and mitigative safeguards
- Event Tree Analysis
- Day One review

Day Two

10:15 – 10:30

Log into WebEx training center to test connections

10:30 – 10:45

Welcoming remarks

10:45 – 1:00

- Hazard and Operability Studies
- Scenario development using the Guide Word approach

1:00 – 1:30

Lunch break

1:30 – 4:00

- HAZOP scenarios workshop exercise
- Parameter-based approach
- Other HAZOP variations

Day Three

10:15 – 10:30

Log into WebEx training center to test connections

10:30 – 10:45

Welcoming remarks

10:45 – 1:00

- Process risk concepts and calculations
- Risk matrices and risk magnitudes
- Determining the adequacy of safeguards
- Developing findings and recommendations

1:00 – 1:30

Lunch break

1:30 – 4:00

- PHA facilitation principles
- Addressing previous incidents, facility siting, human factors
- Documenting identified hazards

Day Four

10:15 – 10:30

Log into WebEx training center to test connections

10:30 – 10:45

Welcoming remarks

10:45 – 1:00

- Checklist Analysis
- What-If Analysis; workshop exercise
- What-If/Checklist

1:00 – 1:30

Lunch break

1:30 – 4:00

- Failure Modes and Effects Analysis; workshop exercise
- Fault Tree Analysis
- Choosing the most appropriate PHA method

Day Five

10:45 – 11:00

Log into WebEx training center to test connections

11:00 – 11:15

Welcoming remarks

11:15 – 1:00

- PHAs of procedure-based operations
- Procedure-based What-If and HAZOPs
- Procedure-based workshop exercise
- Programmable control considerations

1:00 – 1:30

Lunch break

1:30 – 3:30

- Updating/revalidating PHAs
- Report preparation
- Final Q&A session; comprehension check; course wrap-up