Course Title: CCPS’ HAZOP Studies, Other Hazard Evaluation Procedures and Advanced Concepts for Process Hazard Analysis Combo Course

Course ID: CH759
Course Type: Instructor-led (classroom) Course
http://www.aiche.org/ch759

Course Schedule

CCPS’ HAZOP Studies and other PHA Techniques for Process Safety and Risk Management (CH157)

Day One

8:00 – 8:30 Registration
8:30 – 9:00 Introductions; Course Overview
9:00 – 10:00 PHA requirements and standards
10:00 – 10:15 Morning Break
10:15 – Noon Anatomy of process incidents; inherent safety reviews
Noon – 1:00 Lunch Break
1:00 – 3:00 Basic concepts of the HAZOP Study methodology
3:00 – 3:15 Afternoon Break
3:15 – 5:00 HAZOP scenario development

Day Two

8:00 – 8:30 HAZOP Scenario Development (continued)
8:30 – 10:00 Application of HAZOP Study to a continuous process (workshop exercise)
10:00 – 10:15 Morning Break
10:15 – Noon Determining the adequacy of safeguards; documenting findings and recommendations
Noon – 1:00 Lunch Break
1:00 – 2:30 Preparation for the PHA and first team meeting
2:30 – 3:00 Overview for other techniques; Checklist Analysis
3:00 – 3:15 Afternoon Break
3:15 – 4:30 Application of What-If Analysis to continuous process (with workshop)
Day Three

8:00 – 9:30  Application of FMEA to continuous process (with workshop)
9:30 – 10:00  Introduction to Fault Tree Analysis; Method selection
10:00 – 10:15  Morning Break
10:15 – Noon  Hazard evaluation of procedure-based operations (with workshop)
Noon – 1:00  Lunch Break
1:00 – 2:00  PHA updates and revalidations
2:00 – 2:30  PHA completion and reporting
2:30 – 2:45  Afternoon Break
2:45 – 4:30  Comprehension check and review

CCPS’ Advanced Concepts for Process Hazard Analysis Management (CH754)

Day Four

8:00 – 8:30  Registration
8:30 – 9:00  Introductions; course overview
9:00 – 10:00  Hazard analysis of security risks
10:00 – 10:15  Morning Break
10:15 – 12:00  Layer of Protection Analysis (LOPA)
12:00 – 1:00  Lunch Break
1:00 – 3:00  Conditional modifiers; HAZOP/LOPA
3:00 – 3:15  Afternoon Break
3:15 – 5:00  HAZOP/LOPA of example process (workshop exercise)

Day Five

8:00 – 10:00  Concept of importance measures applied to PHAs (workshop exercise)
10:00 – 10:15  Morning Break
10:15 – 12:00  Using a PHA to identify Safety Instrumented Systems and determine Safety Integrity Levels
12:00 – 1:00  Lunch Break
1:00 – 2:30  Tools for assessing impacts of PHA scenarios
2:30 – 3:00  Evaluating chemical reactivity hazards in PHAs
3:00 – 3:15  Afternoon Break
3:15 – 4:30  Additional topics of interest; course wrap-up