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

Course ID:	Course Type:
CH759	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