



**Course Title:** CCPS' HAZOP Studies & Other PHA Techniques for Process Safety & Risk Management

<b>Course ID:</b>	<b>Course Type:</b>
CH157	Instructor-led (classroom) Course
<a href="http://www.aiche.org/ch157">http://www.aiche.org/ch157</a>	

**Course Schedule**

Day One

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

Day Two

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

## Day Three

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