Course Title: CCPS' Foundations of Process Safety

<table>
<thead>
<tr>
<th>Course ID:</th>
<th>CH910</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Type:</td>
<td>Instructor-led (classroom) Course</td>
</tr>
<tr>
<td><a href="http://www.aiche.org/ch910">http://www.aiche.org/ch910</a></td>
<td></td>
</tr>
</tbody>
</table>

Course Schedule

Day One

- **7:30 - 8:00** Registration
- **8:00 – 8:15** Welcoming Remarks
- **8:15 – 11:30** Introduction to Process Safety
  - Key Concepts and Anatomy of an Incident
  - Loss of Containment (and Prevention/Mitigation)
- **11:30 – 12:30** Lunch Break
- **12:30 – 5:00** Management Systems for Process Safety – a Risk-Based Approach

FIRST FOUNDATION BLOCK – COMMIT TO PROCESS SAFETY
- 1. Process Safety Culture
- 2. Compliance with Standards
- 3. Process Safety Competency
- 4. Workforce Involvement
- 5. Stakeholder Outreach
Day Two

8:00–11:30  FIRST FOUNDATION BLOCK--COMMIT TO PROCESS SAFETY
(continued)
Human Factors
  6. Process Safety Knowledge Management
     Elements of Process Knowledge Management
     6.1 Inherent Hazards of Chemicals
        Flammability & Combustibility
        Chemical Reactivity Hazards
        Toxicity
        Corrosivity

11:30–12:30  Lunch Break
12:30–5:00  6.2 Process Plant Design Considerations
            Inherently Safer Design Concepts
            Layout & Spacing
            Overpressure & Vacuum
            Fire Prevention & Mitigation
            Hazardous Area Classification
            Static Electricity, Grounding, Bonding, and Inerting
            Flame & Detonation Arrest
            Fireproofing, Firewalls, and Emergency Isolation

SECOND FOUNDATION BLOCK – UNDERSTANDING
HAZARDS & RISKS
  7. Hazard Identification and Risk Analysis (HIRA)
     Hazard Identification

Day Three

8:00–11:30  7. Hazard Identification and Risk Analysis (HIRA) (continued)
             Analyzing Potential Consequences & Impacts
             Estimating Probability
             Risk Analysis, Risk Assessment, and Risk Tolerance

11:30–12:30  Lunch Break
12:30–5:00  8. Operating Procedures
             9. Safe Work Practices
             10. Asset Integrity and Reliability
             11. Contractor Management
             12. Training and Performance Assurance
Day Four

8:00–11:30  THIRD FOUNDATION BLOCK—MANAGE RISK (continued)
            13. Management of Change
            14. Operational Readiness
            15. Conduct of Operations
            16. Emergency Management

11:30–12:30  Lunch Break

12:30–5:00  FOURTH FOUNDATION BLOCK—LEARN FROM EXPERIENCE
            17. Incident Investigation
            18. Measures and Metrics
            19. Auditing
            20. Management Reviews and Continuous Improvement