Course Title: CCPS’ Process Safety Boot Camp

Course ID: CH900
Course Type: Instructor-led (classroom) Course

http://www.aiche.org/ch900

Course Schedule

Day One

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>7:30 – 8:00</td>
<td>Registration</td>
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<tr>
<td>8:00 – 8:15</td>
<td>Welcoming Remarks</td>
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</table>
| 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

THIRD FOUNDATION BLOCK – MANAGE RISK
8. Operating Procedures

11:30 – 12:30
Lunch Break

12:30 – 5:00
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