

Course Title: CCPS' Foundations of Process Safety

Course ID:	Course Type:
CH910	Instructor-led (classroom) Course
http://www.aiche.org/ch910	

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

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