MERCURY

Intermediate Process Safety Training Course

1 – 5 November 2027
Washington DC (USA)



Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

MERCURY

Intermediate Process Safety Training Course

Ref: 15857_1066850 **Date:** 1 – 5 November 2027 **Location:** Washington DC (USA) **Fees:** 8300 Euro

Introduction:

The Intermediate Process Safety training course enhances participants' understanding of process safety principles and their application in industrial environments. It bridges foundational knowledge with advanced safety practices, focusing on risk management, hazard identification, and operational integrity.

Participants will explore case studies, industry standards, and effective strategies to prevent incidents and mitigate risks. This Intermediate Process Safety course will deepen attendees of process safety frameworks and the tools required to implement safety measures that protect personnel, assets, and the environment.

The Intermediate Process Safety training enhances knowledge and skills in process safety management, focusing on process safety fundamentals and its role in industrial operations. Participants will explore process safety principles, the meaning and definition of process safety, and gain insights into process safety elements.

This Intermediate Process Safety program covers process safety compliance, standards, and the importance of an effective process safety program. It is Ideal for process safety engineers and professionals who want to delve into process safety risk analysis. It offers practical process safety solutions through case studies and interactive sessions led by expert process safety consultants.

With topics ranging from industrial process safety to why process safety is important, attendees will develop skills to align with Intermediate Process Safety certification requirements. Discover process safety, its application in various industries, and how process safety consulting can optimize operations while ensuring safety compliance.

Targeted Groups:

- Process safety engineers.
- Operations and maintenance supervisors.
- HSE Health, Safety, and Environment professionals.
- Plant and facility managers.
- Risk management specialists.
- Project engineers in process industries.
- Compliance and regulatory officers.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Course Objectives:

At the end of this Intermediate Process Safety course, the participants will be able to:

- Enhance understanding of process safety principles.
- Develop skills in identifying and assessing hazards.
- Strengthen knowledge of risk management techniques.
- Learn to implement process safety management systems.
- Improve strategies for incident prevention and mitigation.
- Foster compliance with industry safety regulations.
- Build competencies in conducting root cause analyses.
- Promote the integration of a robust safety culture.

Targeted Competencies:

By the end of this Intermediate Process Safety training, the participant's competencies will:

- Process safety risk assessment.
- Hazard identification and analysis.
- Incident prevention and mitigation.
- Process safety management PSM frameworks.
- Regulatory compliance and safety standards.
- Safety culture enhancement.
- Emergency response planning.
- Root cause analysis and investigation techniques.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

MERCURY

Course Content:

Unit 1: Fundamentals of Process Safety:

- Overview of process safety principles.
- Importance of process safety in industrial operations.
- Key terminologies and concepts in process safety.
- Historical incidents and lessons learned.
- Relationship between process safety and occupational safety.

Unit 2: Hazard Identification and Risk Assessment:

- Techniques for identifying process hazards.
- Hazard and operability study HAZOP methodology.
- Fault tree analysis and event tree analysis.
- Risk matrix development and application.
- Scenario-based risk assessments.
- Assessing the impact of human factors on risks.

Unit 3: Process Safety Management Systems:

- Elements of an effective process safety management PSM framework.
- Developing and maintaining safety-critical systems.
- Managing changes through Management of Change MOC procedures.
- Conducting process hazard analyses PHAs.
- Safety audits and performance monitoring.
- Documentation and record-keeping for compliance.

Unit 4: Incident Prevention and Emergency Preparedness:

- Strategies for proactive incident prevention.
- Identifying and controlling operational risks.
- Developing emergency response and evacuation plans.
- Implementing layers of protection analysis LOPA.
- Training programs for emergency scenarios.
- Reviewing and improving incident response procedures.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Unit 5: Safety Culture and Continuous Improvement:

- Building a strong process safety culture.
- Leadership's role in fostering safety commitment.
- Encouraging employee participation in safety initiatives.
- Continuous improvement through root cause analysis.
- Sharing and applying lessons learned from near misses.
- Implementing feedback mechanisms for safety enhancement.