

The Process Safety Management (PSM) and Operational Risk Control

COURSE OVERVIEW

This advanced functional course provides a framework on the systems and analytical tools used to identify, evaluate, and control risks in industrial operations. The course curriculum elaborates on the systematic management of hazardous materials and complex operations, ensuring the prevention of catastrophic incidents such as explosions, toxic releases, and large-scale equipment failures. Participants will learn how to integrate process safety principles into day-to-day operations, maintenance activities, and leadership decision-making to establish a proactive safety culture.

WHO SHOULD ATTEND?

This course is designed for Health, Safety, and Environment (HSE) officers, risk managers, process safety engineers, operations and maintenance supervisors, plant and facility managers, chemical and process engineers. It is equally valuable for asset integrity and reliability engineers, environmental and Safety auditors, emergency response coordinators, quality assurance and compliance officers, regulators and policy makers in the industrial safety sector

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand the core principles, regulations, and standards governing process safety management (PSM).
- Identify, assess, and prioritize process hazards using structured risk assessment techniques.
- Implement and monitor control measures to prevent or mitigate process-related incidents.
- Develop, document, and maintain effective safety management systems aligned with international best practices.
- Conduct hazard and incident investigations to determine root causes and corrective actions.
- Integrate human factors and behavioural safety principles into PSM frameworks.
- Strengthen organizational preparedness and foster a proactive, sustainable safety culture.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The foundations and strategic importance of Process Safety Management in industrial operations.
- How to identify critical process hazards and assess their potential impact on people, assets, and the environment.
- How to apply Layers of Protection Analysis (LOPA) and Safety Integrity Level (SIL) assessments.
- Techniques for operational risk control, including barrier management and performance monitoring.
- The integration of Management of Change (MOC) systems into safe operational practices.
- The importance of leadership, culture, and competency in sustaining process safety excellence.
- How to investigate process incidents and translate findings into actionable preventive measures.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate.
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded.