

# Resilience Planning & Emergency Preparedness in Energy Systems

## COURSE OVERVIEW

This course provides an in-depth understanding of risk assessment frameworks, contingency planning, crisis response strategies and resilience building measures tailored to the unique challenges of energy infrastructures. It offers participants the knowledge and tools needed to anticipate, mitigate and effectively respond to disruptions across the energy value chain. Through case studies and practical simulations, participants will explore how to ensure operational continuity, safeguard critical assets and strengthen organizational readiness against natural, technical and human induced threats.

## WHO SHOULD ATTEND?

This course is ideal for energy sector professionals, including engineers, operations managers, safety and risk officers, policy makers and emergency response coordinators. It also benefits executives and strategic planners responsible for ensuring energy security, reliability and resilience within utilities, oil and gas companies, renewable energy firms and regulatory bodies.

## COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Develop a strong understanding of resilience concepts and their application in energy systems.
- Conduct effective risk and vulnerability assessments for energy infrastructure.
- Design and implement comprehensive emergency preparedness and response plans.
- Apply crisis communication and decision-making frameworks during disruptions.
- Strengthen organizational capacity for resilience through best practices and innovative approaches.
- Use digital tools and analytics to enhance situational awareness and response efficiency.

## KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The principles of resilience planning to ensure energy system reliability during disruptions.
- Methods to assess vulnerabilities and prioritize critical energy infrastructure investments.
- Designing emergency preparedness plans including response and recovery strategies.
- Integration of smart grid technology and distributed energy resources for resilience.
- Collaboration between stakeholders for coordinated emergency management.
- Financial and policy tools to support resilience and rapid restoration of energy services.

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