

AI-Powered Risk Analysis and Strategic Decision-Making in Oil & Gas Projects

COURSE OVERVIEW

This course explores AI-driven analytics, predictive modelling and machine learning and its ability to enhance decision making, improve operational resilience, and optimize project outcomes. The course has been curated to equip professionals with advanced knowledge and practical tools for leveraging artificial intelligence in assessing, mitigating and managing risks throughout the life cycle of oil and gas projects. Through practical examples and global case studies, participants will gain insights into real world applications, case studies and cutting-edge technologies shaping the future of risk management in the energy sector.

WHO SHOULD ATTEND?

This course is tailored for oil and gas professionals, project managers, risk analysts, engineers, data scientists, strategists and decision makers involved in project planning, operations and management. It is also valuable for executives and policymakers seeking to integrate AI into corporate strategies and ensure sustainable, efficient, and risk aware project execution.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Apply AI-driven tools to identify, evaluate, and mitigate project risks.
- Develop data-informed strategies for complex decision-making in oil and gas projects.
- Integrate predictive analytics into project planning and execution.
- Enhance operational efficiency and resilience through AI-enabled risk frameworks.
- Leverage real-time insights to optimize safety, performance, and profitability.
- Apply scenario-based simulations to anticipate project challenges and support strategic planning.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Fundamentals of AI in risk analysis and decision-making.
- Machine learning models for project forecasting and risk prediction.
- Case studies from upstream, midstream, and downstream operations.
- AI-powered tools for real-time risk monitoring and response.
- Strategic frameworks for integrating AI into organizational decision processes.
- Practical exercises and simulations for hands-on learning.

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