

AI and Digital Tools in Power Project Financial Analytics

COURSE OVERVIEW

This course provides an in-depth understanding of how AI and digital tools are reshaping financial analytics in the power sector. Participants will explore how digital transformation and AI technologies are integrated into financial modeling, cost optimization, and performance management across the lifecycle of power projects. The curriculum examines tools such as machine learning-based forecasting, real-time data visualization, digital twins, and automation for financial reporting and asset valuation. Through interactive sessions and simulation exercises, delegates will learn how to harness AI-driven insights for revenue forecasting, credit risk modeling, and investment optimization.

WHO SHOULD ATTEND?

This course is designed for energy finance professionals, project analysts, investment managers, data scientists, engineers, and decision-makers involved in the financial management of power sector projects. It is equally valuable for utility finance teams, infrastructure investment officers, digital transformation leads, and policymakers seeking to integrate AI and digital tools into financial analytics, performance optimization, and strategic planning in the energy industry.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Apply data-driven techniques to enhance forecasting accuracy and investment decisions.
- Use AI tools for cost modeling, project valuation, and financial risk assessment.
- Integrate digital dashboards and visualization tools for real-time financial performance monitoring.
- Build predictive models for cash flow, tariff, and demand forecasting in power projects.
- Implement AI-based algorithms for asset management and operational efficiency.
- Develop strategies for digital transformation in financial management within power utilities and projects.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The evolution of financial analytics from spreadsheets to AI-driven, cloud-based systems.
- How machine learning enhances revenue prediction, risk modeling, and credit assessment.
- The role of automation in financial data collection, reporting, and reconciliation.
- How digital dashboards enable real-time financial monitoring and decision support.
- The concept of digital twins for financial scenario simulation in power projects.
- Key AI tools and platforms (Python, Power BI, Tableau, TensorFlow, etc.) used for energy analytics.
- How to design AI-driven models for cost optimization and capital allocation.

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.