

Risk-Based Budgeting and Cost Control in Power Infrastructure Projects

COURSE OVERVIEW

This course provides an understanding of how to strategically manage project costs and financial risks throughout the lifecycle of energy and power infrastructure projects. The curriculum emphasizes best practices in cost governance, contingency planning, and budget optimization, ensuring that participants learn how to design budgeting systems that integrate risk assessment, scenario modeling, and sensitivity analysis to improve financial accuracy and decision-making in complex projects such as power plants, transmission networks, and renewable energy installations. Through practical case studies, delegates can build financially resilient projects capable of adapting to dynamic market and operational conditions.

WHO SHOULD ATTEND?

This course is designed for project managers, cost engineers, financial analysts, power sector planners, risk officers, auditors, and procurement specialists engaged in the development and management of power infrastructure projects. It is also ideal for professionals from public utilities, energy ministries, independent power producers (IPPs), EPC firms, and development finance institutions who oversee budgeting, cost control, and financial risk management processes. It is equally valuable for executives and decision-makers involved in project appraisal, funding allocation, and performance evaluation.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Identify financial risks and integrate mitigation strategies into project cost plans.
- Apply probabilistic and scenario-based modeling for cost estimation and forecasting.
- Utilize earned value management (EVM) for performance tracking and financial control.
- Conduct variance and sensitivity analyses to identify cost drivers and inefficiencies.
- Apply AI and digital analytics to improve budgeting precision and transparency.
- Enhance overall project sustainability and profitability through proactive cost governance.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The principles of risk-based budgeting and how they differ from traditional cost planning.
- How to link project risk assessment directly to budget formulation and financial control.
- The use of quantitative risk analysis (QRA) and Monte Carlo simulations for cost forecasting.
- How to apply earned value management to evaluate performance against budget baselines.
- The role of cost governance frameworks in enhancing accountability and compliance.
- Methods for managing financial risks in multi-phase and cross-sector power infrastructure.

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.