



Risk Management for Capital Projects

Potential PDH: 24 – 50

Description:

This course is designed for project managers, project engineers, and all disciplines that work on integrated project teams for capital projects.

YOU WILL LEARN

- To apply risk management to a capital project throughout the entire life cycle
- How to write a risk management plan and gain alignment with key stakeholders
- How to engage management and project team members in the risk management process
- How to systematically identify risks for your project
- Determine those risks that are owned by the project team and those owned by management
- Use risk assessment to analyze and prioritize risks for treatment
- Develop robust risk mitigation plans
- How to control and monitor risk
- Incorporate risk planning into project cost and schedule
- The role of probabilistic cost and schedule in risk management

ABOUT THE COURSE

This five-day intermediate level course for project managers, project engineers, and integrated project team discipline members addresses the key areas associated with capital project risk management. The course focuses on managing risk throughout the entire project life cycle. This course is very much hands-on with class exercise case studies that focus on participant development of risk management deliverables. The class also addresses the methods that project team leaders can utilize to ensure that project team members and management buy in and are part of the risk management process.

Outline:

- Risk management planning
- Roles/responsibilities, governance, and risk ownership
- Identify, analyze, and respond to risk events
- Types of risks: threats vs. opportunities
- Risk analysis and prioritization
- Risk mitigation and contingency planning
- Monitor and control risk
- Risk reporting and communication
- High level overview of probabilistic cost and schedule



- Peer reviews

Subject Matter Expert (SME):

Pieter 'Pete' Luan is a seasoned expert with over 30 years of experience in management consulting, project management, and project consulting within the petrochemical and energy industries. He has served as a project consultant on major initiatives, including three petrochemical megaprojects totaling \$15 billion and a \$6 billion refinery expansion, where he led peer reviews, gate-clearing processes, and constructability and execution planning sessions. Pete has collaborated with senior management to enhance the predictability of brownfield projects, focusing on front-end planning, risk management, contracting strategies, and governance to ensure project success.

As a dedicated educator and leader, Pete has developed and delivered courses on project controls, risk management, and project delivery systems. He has also facilitated workshops on enterprise capital risks, executive alignment, and project governance. Holding both Bachelor's and Master's degrees in Mechanical Engineering from **Rice University**, Pete combines technical expertise with practical experience to help professionals optimize project outcomes, improve performance metrics, and mitigate risks effectively.