Tel No:+97126654546 | Fax No:+97126654182 | Email: training@cmc-me.com | www.cmc-me.com



TM231-3D:
Project Economics & Performance Management

Training Description:

This intensive course covers the economics in the petroleum industry including the principles of development economics, nominal and real cashflow and project financing; the uncertainty in investments and the expected money value (EMV), expected profitability index (EPI) and expected opportunity loss (EOL); and the risk and uncertainty including risk eversion and premium, exploration project threats and opportunities, economic decision criteria, decision tree analysis, and probability distribution.

Further, this course will also cover the spreadsheet calculations using Excel; the cashflow analysis, sensitivity analysis calculations, Tornado diagrams and Monte Carlo simulations; the oil field development model and developing an integrated economic model of an oil field development; the project success and failure covering the characteristics of projects and the fundamentals of project management; and the value-driven project management covering value modelling and metrics, metric characteristics, selection, training and management.

During this interactive course, participants will learn the project scope planning, schedule planning and cost planning; monitoring performance through effective planning and reporting techniques by controlling uncertainty, controlling stakeholders, key performance indicators, status reports and project dashboards; monitoring and controlling project performance by applying variance analysis using earned value management, forecasting to control project budgetary and schedule concerns, managing change and advanced status reporting techniques; and the stakeholder management, issues management, scope verification, management of project records, problem -solving and decision-making tools and techniques.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Apply and gain a good working knowledge on project economics and performance management
- ✓ Discuss the economics in the petroleum industry including the principles of development economics, nominal and real cashflow and project financing
- ✓ Explain the uncertainty in investments and define expected money value (EMV), expected profitability index (EPI) and expected opportunity loss (EOL)
- ✓ Determine the risk and uncertainty including risk eversion and premium, exploration project threats and opportunities, economic decision criteria, decision tree analysis, and probability distribution
- ✓ Set-up spreadsheet calculations using Excel and apply spreadsheet calculations, cashflow analysis, sensitivity analysis calculations, Tornado diagrams and Monte Carlo simulations
- ✓ Illustrate oil field development model and develop an integrated economic model of an oil field development
- ✓ Interpret project success and failure covering the characteristics of projects and the fundamentals of project management
- ✓ Carryout value-driven project management covering value modelling and metrics, metric characteristics, selection, training and management
- ✓ Implement project scope planning, schedule planning and cost planning
- ✓ Monitor performance through effective planning and reporting techniques by controlling uncertainty, controlling stakeholders, key performance indicators, status reports and project dashboards

- ✓ Monitor and control project performance by applying variance analysis using earned value management, forecasting to control project budgetary and schedule concerns, managing change and advanced status reporting techniques
- ✓ Employ stakeholder management, issues management, scope verification, management of project records, problem -solving and decision-making tools and techniques

Training Designed for:

This course is intended for Planning Managers, Oil and Gas Engineers, Project Managers, Analysts, Commercial Managers, Economists, Government Official, Geologist, Business Advisors, Asset Managers, E & P Managers and other Key Members of oil and gas project teams.

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ PRE-TEST
- ❖ Introduction
- ❖ Economics in the Petroleum Industry
  - Introduction to Petroleum Industry
  - Principles of Development Economics
  - Understanding of Economics Terms
  - Inflation & its Impact on Nominal & Real Cash Flows
  - Project Financing
- ❖ Uncertainty in Investments
  - Handling Uncertainty in Capital Projects
  - Understanding Probability Concepts
  - The Expected Value Concept: Features & Pitfalls
  - Expected Money Value (EMV)
  - Expected Profitability Index (EPI)
  - Expected Opportunity Loss (EOL)
- ❖ Risks & Uncertainty
  - Risk & Uncertainty
  - Risk Eversion & Risk Premium
  - Exploration Project Threats & Opportunities
  - Economic Decision Criteria
  - Decision Tree Analysis
  - Probability Distribution
  - Case Study: Monte Carlo Simulation

DAY TWO:

- Setting up Spreadsheet Calculations Using Excel
  - Spreadsheet Calculations
  - Cashflow Analysis
  - Sensitivity Analysis Calculations
  - Tornado Diagrams
  - Introduction to Monte Carlo Simulations using @Risk
  - Class Exercises: Setting-up an Oil Field Project
- Practical Use of the @Risk Add-on: Oil Field Development Model
  - Developing an Integrated Economic Model of an Oil Field Development
  - Developing & Using an @Risk Model Analysis
  - Project Sensitivity Analysis Utilizing Data from @Risk Model
  - Training Final Review & Close
- Understanding Project Success & Failure
  - Characteristics of Projects
  - Fundamentals of Project Management
  - Starting a Project – The Charter
  - Starting a Project – The Team
- Simulator (Hands-on Practical Sessions)
  - Practical sessions will be organized during the course for participants to practice the theory learnt. Participants will be provided with an opportunity to carryout various exercises using our state-of-the-art "MS Project" and "Risky Project Software"

DAY THREE:

- Value-Driven Project Management
  - Value Modelling & Value Metrics
  - Metric Characteristics, Selection, Training & Management
  - Project Scope Planning – Work Breakdown Structures
  - Schedule Planning – Build & Optimize Project Timeline
  - Cost Planning – Estimation & Construction of the Project Budget
- Monitoring Performance Through Effective Planning & Reporting Techniques
  - Controlling Uncertainty – Risk Management
  - Controlling Stakeholders – Communications Considerations
  - Key Performance Indicators Status Reports & Project Dashboards
- Monitoring & Controlling Project Performance
  - Variance Analysis Using Earned Value Management
  - Forecasting to Control Project Budgetary & Schedule Concerns
  - Managing Change
  - Advanced Status Reporting Techniques
- Stakeholder Management
  - Issues Management
  - Scope Verification – Requirements Traceability
  - Management of Project Records
  - Problem-Solving: Identification, Analysis & Generation of Solutions

- Decision-Making Tools & Techniques

❖ Course Conclusion
❖ POST-TEST and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:
Aisha Relativo - Training & Career Development Manager
aisha@cmc-me.com / training@cmc-me.com
Tel.: +971 2 665 3945 or +971 2 643 6653 | Mob.: +971 52 2954615