Oil and Gas Cost Estimation and Budgeting Training Course

Ref: #BC3349

Oil and gas, cost estimation, capital budgeting, project finance, investment appraisal, risk analysis, economic evaluation, financial modeling, petroleum economics, decision-making, upstream, midstream, downstream, oilfield development, production optimization, cost control, budget management, financial planning, profitability analysis, discounted cash flow, sensitivity analysis, scenario planning, Monte Carlo simulation, cost engineering, asset valuation, energy economics, petroleum industry, financial analysis, project management, capital expenditure, operating expenditure, cost forecasting, budget allocation, financial risk, investment decisions, economic indicators, regulatory compliance, strategic planning, performance measurement, value creation.

Course Introduction / Overview:

The Oil and Gas Cost Estimation and Budgeting Training Course offered by BIG BEN Training Center provides a comprehensive understanding of the financial aspects of the oil and gas industry. This course is designed to equip participants with the skills necessary to effectively estimate costs, manage budgets, and make sound investment decisions in this dynamic sector. Participants will learn how to apply various cost estimation techniques, including analogous estimating, parametric estimating, and bottom-up estimating. The course also covers capital budgeting principles, project finance, and investment appraisal methods such as net present value (NPV), internal rate of return (IRR), and payback period. Furthermore, the course delves into risk analysis, economic evaluation, and financial modeling, enabling participants to assess the financial viability of oil and gas projects. Participants will also explore petroleum economics, decision-making processes, and strategies for production optimization and cost control across upstream, midstream, and downstream operations. The course draws upon the principles outlined in "Petroleum Economics and Engineering Practice" by Donald Jones, providing a solid academic foundation for practical application.

Target Audience / This training course is suitable for:

- Project managers.
- Cost engineers.
- Financial analysts.
- Budgeting professionals.
- Investment analysts.
- Petroleum engineers.
- Geologists.
- Geophysicists.
- Reservoir engineers.
- Production engineers.
- Operations managers.
- Business development managers.
- Strategic planners.
- Regulatory affairs specialists.
- Government officials involved in the oil and gas sector.

Target Sectors and Industries:

- Oil and gas exploration and production companies.
- Oil and gas refining and processing companies.
- Oil and gas transportation and storage companies.
- Oilfield service companies.
- Engineering, procurement, and construction (EPC) companies.
- Consulting firms specializing in the oil and gas industry.
- Financial institutions investing in the oil and gas sector.
- Government agencies regulating the oil and gas industry.
- Energy sector research and development organizations.
- Renewable energy companies involved in hybrid projects.

Target Organizations Departments:

- Finance departments.
- Accounting departments.
- Project management offices (PMOs).
- Engineering departments.
- Operations departments.
- Business development departments.
- Strategic planning departments.
- Investment analysis departments.
- Risk management departments.
- Cost control departments.
- Budgeting departments.
- Procurement departments.
- Asset management departments.
- Regulatory compliance departments.

Course Offerings:

By the end of this course, the participants will have able to:

- Apply cost estimation techniques to oil and gas projects.
- Develop and manage capital budgets effectively.
- Perform investment appraisal using NPV, IRR, and payback period.
- Conduct risk analysis and economic evaluation of oil and gas projects.
- Build financial models for project evaluation.
- Understand petroleum economics and its impact on decision-making.
- Optimize production and control costs in upstream, midstream, and downstream operations.
- Analyze financial statements and performance metrics.
- Make informed investment decisions in the oil and gas sector.
- Comply with regulatory requirements related to financial reporting and budgeting.

Course Methodology:

BIG BEN Training Center employs a blended learning approach that combines theoretical concepts with practical applications. The course incorporates case studies, real-world examples, and interactive exercises to enhance participant engagement and knowledge retention. Participants will work in teams to solve complex problems, develop financial models, and present their findings. The training methodology includes lectures, group discussions, simulations, and hands-on workshops. Case studies will focus on actual oil and gas projects, allowing participants to apply the concepts learned to realistic scenarios. Teamwork is emphasized to foster collaboration and knowledge sharing among participants. Interactive sessions will provide opportunities for participants to ask questions, share their experiences, and receive feedback from the instructor. The course also incorporates the use of financial modeling software to provide participants with practical experience in building and analyzing financial models.

Course Agenda (Course Units):

Unit One: Introduction to Oil and Gas Economics and Cost Concepts

- Overview of the oil and gas industry.
- Basic economic principles in the oil and gas sector.
- Cost classifications: direct, indirect, fixed, and variable costs.
- Understanding cost drivers and their impact on project economics.
- Introduction to cost indices and escalation factors.

Unit Two: Cost Estimation Techniques in Oil and Gas Projects

- Analogous estimating.
- Parametric estimating.
- Bottom-up estimating.
- Three-point estimating (PERT).
- Cost estimation software and tools.

Unit Three: Capital Budgeting and Investment Appraisal

- Principles of capital budgeting.
- Discounted cash flow (DCF) analysis.
- Net present value (NPV).
- Internal rate of return (IRR).
- Payback period.
- Profitability index.

Unit Four: Risk Analysis and Economic Evaluation

- Identifying and assessing project risks.
- Sensitivity analysis.
- Scenario planning.
- Monte Carlo simulation.
- Decision tree analysis.
- Economic indicators and their impact on project viability.

Unit Five: Financial Modeling and Project Finance

- Building financial models for oil and gas projects.
- Project finance structures and techniques.
- Debt financing and equity financing.
- Financial ratios and performance metrics.
- Case studies in project finance.

Unit Six: Budget Management and Cost Control

- Budgeting process and techniques.
- Cost control strategies.
- Variance analysis.
- Performance measurement and reporting.
- Earned value management (EVM).

Unit Seven: Regulatory Compliance and Strategic Planning

- Regulatory requirements related to financial reporting and budgeting.
- Strategic planning in the oil and gas industry.
- Investment decisions and portfolio management.
- Value creation and shareholder value.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can oil and gas companies effectively balance short-term profitability with long-term sustainability in their cost estimation and budgeting practices?

What unique qualities does this course offer compared to other courses?

This Oil and Gas Cost Estimation and Budgeting Training Course stands out due to its comprehensive coverage of both theoretical concepts and practical applications. Unlike courses that focus solely on tools or software, this program emphasizes the underlying principles of cost estimation, capital budgeting, and risk analysis. Participants will gain a deep understanding of petroleum economics and its impact on decision-making, enabling them to make informed investment decisions in the oil and gas sector. The course also incorporates real-world case studies and interactive exercises, providing participants with hands-on experience in applying the concepts learned to realistic scenarios. Furthermore, the course draws upon academic literature, such as "Petroleum Economics and Engineering Practice" by Donald Jones, providing a solid academic foundation for practical application. BIG BEN Training Center's course also addresses the critical aspects of regulatory compliance and strategic planning, ensuring that participants are equipped to navigate the complex financial landscape of the oil and gas industry. The course’s focus on value creation and shareholder value also sets it apart, providing participants with a holistic understanding of the financial implications of their decisions.