



**PetroKnowledge**<sup>®</sup>

Energy Consulting Services Limited  
RC: 1244856



# EXECUTIVE TRAINING BROCHURE

[www.petroknowledge.com.ng](http://www.petroknowledge.com.ng)

## VISION STATEMENT

Our Vision to be the foremost energy consulting outfit of choice, nurturing talents and driving productivity in the energy sector.

## MISSION STATEMENT

Our Mission is to provide innovative consultancy services for the energy industry.

## ABOUT US

PETROKNOWLEDGE ENERGY CONSULTING SERVICES LIMITED (PECS) was incorporated in Abuja, Nigeria on February 25, 2015 to provide innovative consultancy services for the energy industry. We are a company driven by a shared vision to be the foremost energy consulting outfit of choice, nurturing talents and driving productivity in the energy sector.

Our operations are premised on the following Core Values or Principles

- Trust
- Accountability
- Clarity and Honesty
- Technology and Innovation
- Integrity
- Commitment; and
- Service Delivery

Our overarching goal is to enhance performance in our clients' operations to enable them maximize their returns on investment in the short term and ensure lasting satisfaction of service delivery. PECS will strategically integrate its business portfolios vertically in the short term and grow its capability horizontally in the energy sector. In the long run PECS will, thereafter, diversify its portfolio into other viable energy sectors.

PECS is an energy consulting outfit engaged in Decommissioning and Abandonment, Corporate Training, Engineering Studies, Project Management, Oil and Gas Financing (Cash Call Management and Alternative Funding Arrangements such as Merchant Cash Advance and Third Party Financing), Risk and Decision Analysis, Feasibility Studies, Energy Policy, Economic Modelling, Project Economic Evaluation, Process Automation, G & G Studies, Contracting Process, Cost Estimation, e-procurement, Petroleum Fiscal Systems, Legislative Framework of Host Government Agreements and Interpretation, Cost Recovery Process, Talent Development, Outsourcing and Enterprise Document Management. System (EDMS).



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UR.0013	Introduction to Fiber Optics for Well Surveillance
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# ECONOMICS AND FINANCE

# INTRODUCTION TO PETROLEUM ECONOMICS EVALUATION METHODS

## OVERVIEW

This course introduces the basic concepts of Petroleum Economics and Project Selection. Several key concepts that will be covered include the time value of money, cash flow basics, common economic indicators, fiscal systems and project selection fundamentals. An introduction to basic risk analysis will also be presented.

Participants will receive an overview of Petroleum Economics, including an introduction to basic cash flow model building. The main types and elements of fiscal regimes around the world will be presented. During this course participants will evaluate and make recommendations on potential oil and gas investments.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- learn why project economics is necessary and the methods for economic evaluation;
- understand the Time Value of Money and how it plays a part in investment decisions;
- understand the concepts of compounding and discounting; and
- understand and practice excel based cash flow modeling.

## COURSE CONTENT

**Day 1** – Investment Decision Concepts

**Day 2** – Time Value of Money

Compounding & Discounting

**Day 3** – Cashflow forecasting & Spreadsheet Modeling

**Day 4** - Measure of Probability

**Day 5** – Risk & Uncertainty Concepts

## TARGET AUDIENCE

Engineers, Geoscientists, Planners, Economists, Management Staff, Supervisors, and Financial Analysts.

## BASIC OIL & GAS FINANCIAL MANAGEMENT PROGRAM

### OVERVIEW

This training course is designed to provide a deeper understanding of Basic Oil and Gas and Financial Management concepts. Participants will have the opportunity of sharing knowledge amongst themselves, and with their peers in other departments. The awareness and understanding of the various financial techniques available will enable delegates to communicate confidently with their financial professionals.

This program will take the formal classroom interactive approach using tools and techniques of financial analysis and management, with state-of-the-art financial management tools to reinforce theoretical knowledge.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- appreciate the specificities of the international petroleum accounting standards;
- understand the fundamentals of cost analysis and control;
- understand different sources of fund available for project execution; and
- analyze the financial position of a company.

### COURSE CONTENT

**Day 1** – Finance and Investment Nomenclature

**Day 2** – Corporate Financial Setting

**Day 3** – Types and Sources of Funds

**Day 4** – Financial Management: Case Study – Project Financing

### TARGET AUDIENCE

Corporate Accountants, Financial Controllers, Treasury Officers, Management Accountants, Joint Venture Accountants, Auditors, Government Regulators, and Financial Investment Analysts

# FUNDAMENTALS OF UPSTREAM PETROLEUM ECONOMICS AND RISK ANALYSIS

## OVERVIEW

This is a practical 5-day course that will cover the fundamental aspects of Upstream Petroleum Economics and Risk Analysis in a lecture and interactive setting. The practical application of theory using computer-based modules will allow participants to construct economic models, incorporate relevant cash-flow data and draw conclusions for informed decision-making.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- develop knowledge of upstream petroleum economic discounted cash flow evaluation methodologies;
- know how oil & gas pricing and forecasting work is done;
- know how to interpret economic results and quantify risks so as to put value to prospects, fields and companies; and
- understand the best practices on how to select best investment opportunities given limited funding.

## COURSE CONTENT

**Day 1** – Introduction of Upstream Petroleum Economics and Cash flow Analysis

Discounted Cash Flow – in-depth analysis  
Capital Budgeting Techniques

**Day 2** – Oil & Gas Asset Net Cash Flow – Project Revenue & Cost Components

Oil & Gas Asset Net Cash Flow – Taxation and Government Take Components  
Oil & Gas Asset Net Cash Flow Determination

**Day 3** – Application of risk in the evaluation of exploration prospects

Advanced Petroleum Economic Techniques  
Petroleum Economic Models

**Day 4** – Discrete Economic Solutions

Probabilistic Economic Solutions  
Continuous Economic Solutions

**Day 5** – Risk Analysis and Exploration Prospect Valuation

Upstream Economics Case Studies

## TARGET AUDIENCE

For all employees who are involved in the upstream and midstream businesses, Petroleum business developers, Operational Managers, Government Policy makers and regulators and Planning Officers.



# ECONOMICS AND RISK ANALYSIS OF OIL & GAS TRADING

## OVERVIEW

This training is designed to give participants a comprehensive picture of the international oil supply, transportation, refining and trade. Also, this Oil & Gas training course will include crude oil and refined markets, risks, legal and regulatory issues involved in the international trading of crude oil and refined products. The course is presented with the wide range of essential practices of petroleum industry spanning exploration, extraction, refining, global oil supply, reserves, production & trade flows.

Since price volatility always exists, the Price Risk Management appropriate techniques are presented in detail. Sales, Marketing, Trading and Risk Management are crucial and also the most dynamic parts of the value chain, and extremely important for managers to stay on top of these activities.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand Upstream oil exploration, Production & Supply principles, and practices;
- understand the refining process, compute refinery gross and net margins;
- understand Linear Programming (LP) models, and develop crude oil selection criteria;
- apply petroleum economics to calculate financial benchmarks and prioritize projects;
- understand the international markets, their risks and how prices are determined;
- understand the hedging instruments, determine the price risk exposure and how to manage price risk; and
- understand the legal and regulatory issues relating to the International aspects of oil trading.

## COURSE CONTENT

**Day 1** – Essential Upstream Practices

**Day 2** – Crude Oil Trading

**Day 3** – Refined Products Trading

**Day 4** – Risk Exposure & Management

**Day 5** – Legal and Regulatory

## TARGET AUDIENCE

Business Development Managers, Lawyers, Geoscientists & Engineers, Members of Board and Oil Executives, Government regulators, Auditors, and Joint Venture officers.

# FUNDAMENTALS OF THE NATURAL GAS & LNG INDUSTRY

## OVERVIEW

LNG has gained immense traction and progress in recent past. LNG businesses are projected to be in full throttle, hence the need to understand it. This includes the commercial and technical risks involved in the end to end operations of the LNG value chain. It is a must for all active players and prospective stakeholders in the LNG industry, especially those looking for opportunities to either expand or diversify their existing business portfolios in the LNG industry.

This training covers the fundamental, technical aspects and practical commercial considerations in LNG from pre-fixture activities, terminals to LNG transportation.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the fundamentals of the entire LNG process chain;
- understand LNG cargo transfer operations from both ship management and terminal perspectives;
- understand the trade routing and cargo management options for LNG;
- make accurate measurements and calculations of LNG custody transfer;
- examine the impact of various design codes and guidelines on LNG ship and shore transfer management;
- better manage LNG supply transportation contracts and shipping documents; and
- learn about the LNG tanker business and operations.

## COURSE CONTENT

**Day 1** – Types of LNG Carriers, Terminals, Storage and Tanks/LNG Treatment and the Science

**Day 2** – The Stages of LNG Cargo Cycle

**Day 3** – LNG Transfer Systems -Naval Architecture [Ship Design] and Available New Technologies

**Day 4** – ESD 1 and 2 Design Codes and Operations

**Day 5** – LNG Custody Transfer Measurement and Calculations

## TARGET AUDIENCE

Marketers, Ship Owners and Managers, Technical and Operations Executives, Superintendents and Safety Officers, Loading and Mooring Masters, Liquid Cargo and Bunker Surveyors, Company Assurance Managers and Superintendents.

# FUNDAMENTALS OF INVESTMENT DECISIONS AND PORTFOLIO MANAGEMENT

## OVERVIEW

This training will give participants the edge in making best investment decisions by exposing them to various money and capital markets securities. It will further open participants' minds to the investment theories along with how to incorporate the best practices in investment decision and portfolio management during the business planning process. The course will highlight a proven process and technology for investment decision and portfolio management considering risk and uncertainty factors.

Participants will gain an overview of important concepts and processes for investment decision and portfolio analysis, and in addition, learn an easy-to-follow process for portfolio optimization to meet investment goals.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- learn basic investment terms;
- learn about portfolio and market securities;
- understand the important role of time value of money in investment decision;
- learn to define and evaluate strategies and scenarios of diversifying investment;
- understand the concept of market interest rate; and
- learn to address various problems in portfolio management, as well as learn to make the best investment portfolio decisions.

## COURSE CONTENT

**Day 1** – Investment Terms, Categories, Strategies and Regulations

**Day 2** – Time Value of Money and Market Interest rate

**Day 3** – Portfolio Management and Capital Asset Pricing Model (CAPM)

**Day 4** – Portfolio Analysis and Performance Evaluation

## TARGET AUDIENCE

Finance Managers, Portfolio Managers, Project Managers, Supervisors, Planners, Accountants, Auditors, Engineers, Geoscientists, and Business Developers.

## UNDERSTANDING GAS AND POWER SUPPLY MARKETS

### OVERVIEW

The development of new energy applications and markets becomes paramount with the changing environmental and economic pressures as well as consumer demand and government policy. These changes have triggered the signal of how highly significant the gas and power sector will grow. This course is designed to enrich its participants with knowledge needed to understand, keep pace with, and succeed in the emerging and competitive gas and power generation markets.

The essential skills needed for success in the gas and power supply markets that is rapidly changing will be discussed through lecture presentations and interactive exercises that will be led by a team of expert with enormous wealth of industry and training experience.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn about the power industry transition from monopolistic to competitive market;
- learn about the key principles of energy trading;
- understand the principle drivers of IPP, LNG and GTL market developments;
- learn legal and contractual framework for energy markets as well pricing, transportation and security of supply; and
- investigate principles of market regulation.

### COURSE CONTENT

**Day 1** – The Global Context for Gas

**Day 2** – Developing and Regulating Energy Markets

**Day 3** – Economics of Gas and Power

**Day 4** – Legal and Contractual Framework for Energy Markets

**Day 5** – Series of Interactive Case Studies

### TARGET AUDIENCE

Economists, Strategists, Risk Manager, Regulators, Management Consultants, Energy Lawyers, and Project Financiers.

## CONTRACT RISK MANAGEMENT IN UPSTREAM OIL & GAS VENTURES

### OVERVIEW

Contract Risk Management in Upstream Oil & Gas is structured to minimize loss through effective and efficient control and management of contracts particularly those in upstream operations. Business success in the petroleum industry is affected by how you manage risks inherent within your contracts. Failure to mitigate these risks or avoid contractual hazards could cost you millions.

The training course will enable the participant to understand the risks inherent in contracts and implement contractual risk management processes in the upstream sector of the Oil & Gas Industry.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn how to protect their businesses by evaluation of equitable allocation of risk;
- assess and discuss the benefits of standard and non-standard contracts;
- implement effective indemnity clauses in conflict resolution, and unambiguous contract clauses;
- design risk solutions and successful insurance contracts to safeguard against financial damage; and
- learn about efficient contract management strategies to avoid wastage of time and money.

### COURSE CONTENT

**Day 1** – Contract Risk Management

**Day 2** – Clauses involved in Contract Negotiation

**Day 3** – Insurance Management

**Day 4** – Standard and Non-Standard Contracts

**Day 5** – Conflict Management

### TARGET AUDIENCE

Contract Managers, Lawyers, Supply Chain Managers, Insurance Advisors, Brokers, and Commercial Business Managers

## ESSENTIALS OF INTERNATIONAL GAS TRADING

### OVERVIEW

The Essentials of International Gas Trading is a training course structured to deliver an in-depth appreciation of the process schematic and trade mechanisms involved in natural gas markets. The aim is to develop a practical understanding of the principles, drivers, and tools of trading in different gas markets.

This training will develop the participant's capacity on gas portfolio management, price risk management, and hedging through the understanding of market movements.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand key factors in gas markets development, including liberalization, third party access and competition;
- learn the principles of gas contracts and contractual relationships along supply chains;
- gain an understanding of risk management assessment and strategies;
- acquire essential knowledge about gas trading market structures and development, terminology, systems and exchange; and
- explore trading instruments- forwards and futures, swaps, arbitrage, and options.

### COURSE CONTENT

**Day 1** – Natural gas supply chains, markets, and upstream issues

**Day 2** – Introduction to Gas Pricing and Gas Trading Instruments

**Day 3** – Case Study: the Nigerian Gas Trading Market in relation to Gas Trading Markets around the World

**Day 4** – Trading Simulation and Financial/Risk Management strategies

**Day 5** – The Future of Gas Trading: Examining LNG, G2P, P2G, emerging markets, Changing Players, Policies and Protocols.

### TARGET AUDIENCE

Strategists, Oil and Gas Traders, Economic and Commercial Analysts, Risk Managers, Financial Planners, Contract Professionals, Oil and Gas Executives, and Managers.

# EXPLORATION ECONOMICS, RISK-ANALYSIS, AND PROSPECT EVALUATION

## OVERVIEW

This intensive five-day course covers all phases of oil and gas exploration decision-making. It has a strong practical orientation, with abundant use of realistic exercises to illustrate applications and mechanics of the various concepts and analytical procedures involved in the evaluation and ranking of exploration ventures. The organization of the course follows the characteristics chain of considerations that attend most exploration projects, including both theory and application, and integrates the geological, geophysical, engineering, leasing, economics, and management aspects of such ventures.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- understand basic exploration activities;
- learn the latest methods of dealing with risk and uncertainty; and
- learn the application and utilization of all concepts and techniques in the economic appraisal of a reservoir.

## COURSE CONTENT

**DAY 1** – Introduction to Exploration.

**DAY 2** – Prospect Evaluation Tools.

**DAY 3** – Petroleum Exploration Economic Modeling.

**DAY 4** – Prospect Risk-Analysis.

**DAY 5** – Geological Predictions and Evaluations.

## TARGET AUDIENCE

Geologists, Geophysicists, Petro-Physicists, Engineers, Economists, and Management Staff.

# COMMERCIAL, ECONOMIC AND TRADING ASPECTS OF OIL REFINING

## OVERVIEW

This training course will provide you with an in-depth knowledge of the refining business and an understanding of how trading/hedging can improve margins and reduce risk. The future of the industry is discussed and the main refinery processes are explained.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- learn the various refinery products, their key qualities and trends;
- explore refinery economics and how refinery profitability and performance are appraised;
- develop skills in crude oil and refinery product trading;
- understand crude oil hedging and hedging strategies; and
- determine the product outlook for the world refining industry.

## COURSE CONTENT

**DAY 1** – Overview of the Global Crude Oil Market.

**DAY 2** – Refining and Trading Simulation.

**DAY 3** – Refining Products and Processes.

**DAY 4** – Refinery Economics.

**DAY 5** – Post Refining and Trading Simulation Case Study.

## TARGET AUDIENCE

Financial Analysts, Managers, Chemical Engineers, Petroleum Economists, Geoscientists, Planners, and Petroleum Engineers.



## PORTFOLIO MANAGEMENT & INVESTMENT DECISIONS IN E&P PROJECTS

### OVERVIEW

This training will open participants' minds to the portfolio theory along with how to incorporate the best practices in portfolio management during the upstream oil and gas business planning process. The course will highlight a proven process and technology for portfolio management and optimization used by companies worldwide.

Participants will gain an overview of important concepts and processes for portfolio analysis, in addition, they will learn an easy-to-follow process for portfolio optimization to meet business and corporate goals.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn about corporate planning in E&P companies;
- learn to define and evaluate strategies and scenarios, then analyze and optimize those results in order to make recommendations;
- learn how to model and analyze the impact of business rules; and
- learn to address various problems in portfolio management, as well as learn the methods and importance of optimization.

### COURSE CONTENT

**Day 1** - Corporate Planning in E&P

**Day 2** - Identify and Evaluate Strategies and Scenarios

**Day 3** - Model, Test and Analyze Different Portfolios

**Day 4** - Portfolio Management and Optimization

### TARGET AUDIENCE

Strategists, Oil and Gas Traders, Economic and Commercial Analysts, Risk Managers, Financial Planners, Contract Professionals, Oil and Gas Executives, and Managers.

## CAPITAL BUDGETING AND INVESTMENT ANALYSIS

### OVERVIEW

Effective managers make investment decisions that allocate limited capital resources to achieve organizational goal, while minimizing risk. Great managers stand out not because they have access to particularly rich information, but because they seek the most useful information and accurately evaluate both the risk and potential return.

Capital budgeting is a key strategic skill-set that managers must possess to ensure that capital resources are strategically implemented to generate maximum return. This course aims to equip business managers with the terminology, skill set, and the strategic mindset required to navigate a complex business environment and make the best possible decisions.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn how to structure and evaluate capital investment projects;
- determine how much financing needs to put be in place and the source of capital;
- master investment criterions and profitability indicators; and
- apply their knowledge to identifying investment options.

### COURSE CONTENT

- Day 1** - Introduction
  - Making Investment Decisions
  - Sources of Finance
- Day 2** - Cost of Capital
  - Cost of Equity
- Day 3** - Time Value of Money
  - Net Present Value
  - Cash Flow
- Day 4** - Discount Rates Considerations
  - Other Capital Budgeting Evaluation Techniques
- Day 5** - Lease or Buy Back Decisions
  - Capital Budgeting and Risk

### TARGET AUDIENCE

Strategists, Oil and Gas Traders, Economic and Commercial Analysts, Risk Managers, Financial Planners, Contract Professionals, Oil and Gas Executives, and Managers.

# RISK ANALYSIS AND MANAGEMENT OF PETROLEUM EXPLORATION VENTURES

## OVERVIEW

Exploring for oil and gas is akin to gambling in a casino; it involves repeated trials under conditions of uncertainty. Each of these trials often require enormous commitment in terms of capital investments. More often than not, we do not know what the odds are since our reliance is solely based on scientific guess work by the geoscientist. The extent or magnitude of any exploration uncertainty is best appreciated and reduced under the risk analysis approach to exploration ventures.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the concepts of risk analysis and geotechnical uncertainty estimations;
- explore the concepts of risk analysis to oil and gas upstream projects;
- understand Exploration project management, including an understanding of prospects and play portfolios;
- appreciate cash flow models and DCF analysis tools in evaluating risk and making investment decisions; and
- explore a risk analysis case study centered on Petroleum Industry practices.

## COURSE CONTENT

**Day 1** – Introduction to Risk Analysis and Management

**Day 2** – Geotechnical Estimates under Uncertainty

Exploration Property and Risk Analysis

**Day 3** – Economic Analysis of Exploration Ventures

**Day 4** – Exploration Plays – Risk Analysis & Economic Evaluation

**Day 5** – Management of Exploration Projects

Case Study: Petroleum Industry Practices of Exploration Risk Analysis

## TARGET AUDIENCE

Commercial and Finance Professionals, Oil and Gas Planners, Financial Analysts, Oil & Gas Risk Analysts, Project Managers, and Strategists.

## BASIC ENGINEERING ECONOMICS

### OVERVIEW

From time immemorial and despite remarkable advances in technology, majority of engineering decisions made today are based on economic considerations and this may not likely change in the nearest future. This course is designed to expose the participants to the basic profitability concepts and their applications in Engineering Economics.

### LEARNING OBJECTIVES

At the end of the training, the participant will:

- understand basic economic considerations;
- learn how to rank different projects based on their profitability; and
- learn how to choose from projects with different economic parameters.

### COURSE CONTENT

**DAY 1** – Basic Profitability Concepts.

**DAY 2** – Compounding and Discounting Concepts.

**DAY 3** – Equivalence Concept.

**DAY 4** – Profitability Yardsticks.

**DAY 5** – Case Study I: Investment Analysis.

Case Study II: Preparing an Engineering Economic Feasibility Study.

### TARGET AUDIENCE

Engineers and Economists.

# INTRODUCTION TO GAME THEORY – A STRATEGIC DECISION APPROACH

## OVERVIEW

In our world today, most organizations are embracing Decision Analysis (DA) as a key tool in making informed decisions. These organizations are witnessing tremendous turnover or value in their various line of businesses. The course will expose participants to developing a clear and compelling attitude towards decision making.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the concept of Decision Analysis;
- describe the key elements of Decision Analysis;
- learn about the uses of statistical tools such as probability in decision analysis;
- understand how world-class organizations make informed decisions via case studies; and
- solve for Expected Monetary Value (EMV) and use evaluation techniques to make informed decisions under uncertainty.

## COURSE CONTENT

**Day 1** – Introduction to Decision Analysis

**Day 2** – Concept of Probability in Decision Analysis

**Day 3** – Decision-Making in a Complex World

**Day 4** – Making Decisions Under Uncertainty

**Day 5** – Making Compelling Decisions

## TARGET AUDIENCE

Geologists, Engineers, Managers, Team Managers, Economists, and Planners

## BASIC DECISION TREE ANALYSIS CONCEPTS

### OVERVIEW

Basic Decision Analysis comprises of systematic, quantitative, visual and graphic approaches utilized in making tactical and strategic business decisions. This course uses a variety of tools as it incorporates aspects of management, technical methods and economics.

The training course will enable participants to apply decision analysis tools and techniques in risk, capital investments and strategic business methods.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn to describe the elements of decision analysis process;
- interpret results about risks and uncertainties as probability distributions and statistics;
- apply Monte Carlo simulation and decision trees in solving for Expected Values (Mean);
- create and solve decision models; and
- analyze business alternatives with decision analysis.

### COURSE CONTENT

**Day 1** - Probability and Statistics

**Day 2** - Expected Value (Mean) Concept

**Day 3** - Introduction to Monte Carlo Simulation

**Day 4** - Decision Tree Analysis and Decision Modeling

**Day 5** - Application of Decision Analysis

### TARGET AUDIENCE

Managers, Geologists & Geophysics, Engineers, Economists, and Team Leaders

# ECONOMIC EVALUATION & INVESTMENT DECISION ANALYSIS

## OVERVIEW

This training course will give delegates an in-depth look into recent techniques used by industry experts to take critical investment decisions. The training will include workshops which will have delegates form groups and engage in hands-on appraisal and evaluation of business case studies in order to determine the viability of the projects.

## LEARNING OBJECTIVES

At the end of this training, participants will:

- understand the techniques of determining the Time Value of Money;
- understand how Cash-Flow Forecasts are being modelled;
- understand methods of ranking seemingly viable projects; and
- understand how to execute an effective Sensitivity Analysis.

## COURSE CONTENT

**Day 1** - Time Value of Money.

**Day 2** - Determining appropriate cost of capital.

**Day 3** - Project Cash Flow Forecast.

**Day 4** - Investment Decision Criterion.

**Day 5** - Sensitivity Analysis.

## TARGET AUDIENCE

Business Development Managers, Geoscientists, Engineers, Bankers, Accountants, Auditors, Lawyers & law firms' personnel, Economists, Planners, Government Regulators, Tax & Finance Advisors and Negotiators.

# DATABASE MANAGEMENT & INFORMATION TECHNOLOGY IN THE PETROLEUM INDUSTRY

## OVERVIEW

This training provides delegates with knowledge of data management and analysis in the oil & gas industry. The course presents oil & gas practitioners with the importance of Big Data, its analysis, governance and protection. In addition, it exposes participants to data management skills such as data mining, data storage, archiving and retrieval in the oil & gas industry.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- acquire an in-depth knowledge of Big Data, its processing and applications in the oil & gas industry;
- understand data control and analysis;
- understand data modelling; and
- learn how to secure data and operate in a paperless environment.

## COURSE CONTENT

**Day 1** - Forms and Presentation of Petroleum Data Management.

**Day 2** - Petroleum Data Governance.

**Day 3** - Petroleum Data Management Standard.

**Day 4** – Art of Data Modelling.

**Day 5** - Data Security, Analytics & Management.

## TARGET AUDIENCE

Data Analysts, Business Development Managers, Geoscientists, Engineers, Bankers, Accountants, Auditors, Lawyers & law firms' Personnel, Planners, Economists, and Government Officials.



# ASSET MANAGEMENT & PORTFOLIO INVESTMENTS ANALYSIS

## OVERVIEW

This training course provides knowledge about making sound investment decisions for mutual fund and securities owners with the aim of reaping optimal rewards. The training exposes delegates to important steps to apportioning assets through monitoring and balancing in order to maintain or increase their returns in an increasingly volatile market.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- understand what mutual funds and securities are, and their various forms;
- understand portfolio management;
- understand asset monitoring and balancing; and
- understand portfolio performance and evaluation.

## COURSE CONTENT

**Day 1** - Introduction to Portfolio Management.

**Day 2** - Mutual Funds.

**Day 3** - Securities.

**Day 4** - Asset Management Strategies.

**Day 5** - Evaluating Portfolio Performance.

## TARGET AUDIENCE

Portfolio Managers, Investment Managers, Asset Managers, and Capital Market Operators.

## OVERVIEW OF PETROLEUM PROJECT ECONOMICS

### OVERVIEW

This course will introduce a variety of fundamental Petroleum Economic principles including Revenue, Expenditures (OPEX & CAPEX), Fiscal Systems, Risk Analysis, Time value of Money and Investment Analysis.

This course is an excellent introduction to the fundamentals of petroleum economics. The learning experience will include exercises, class discussions, team presentations, and an interactive challenge.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- learn about the intricacies of the oil and gas industry;
- understand the fiscal regimes and contractual terms in the Oil & Gas Industry;
- understand the workings of the “host government agreement”;
- learn about cash flow and how it operates in the Petroleum Industry;
- understand the various techniques of estimating the viability of investment options; and
- be able to make valid decisions given alternative project choices.

### COURSE CONTENT

**Day 1** - Fundamentals of Petroleum Economics

**Day 2** - Elements & Determinants of Petroleum E&P Investment decisions

**Day 3** - Petroleum Fiscal Regimes and contractual terms

**Day 4** - Host Government Agreement

**Day 5** - Quantitative approach to Project Economic Evaluation:

- Cash Flow
- Time Value of Money
- Internal Rate of Return
- Net Present Value
- Profitability Index
- Payback Period

### TARGET AUDIENCE

Engineers, Geoscientists, Strategists, Oil and Gas Traders, Economic and Commercial Analysts, Risk Managers, Contract Professionals, Oil and Gas Executives and Managers, Financial and Non-Financial Professionals.

## BASIC RISK ANALYSIS IN PETROLEUM EXPLORATION VENTURES MANAGEMENT

### OVERVIEW

Exploration and Production companies must often evaluate their potential E&P investment using proper investment criteria. Metrics like Net Present Value, annual rate of return and other project economic indicators can be estimated to evaluate the significance of a company's investment.

This training course provides practical guidance in the application of economic analysis techniques currently used in the Oil & Gas industry. It is important that one chooses the best alternative when executing a petroleum project as well as to properly evaluate various investment opportunities by determining economic indicators and carrying out sensitivity analysis.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand various economic terms used in the Oil & Gas industry;
- understand how to develop economic models of various petroleum fiscal regimes;
- carry out cash flow analysis, different economic analyses for petroleum related project and determine economic indicators;
- evaluate and quantify risks and uncertainties;
- make the right investment decision in the presence of risk;
- carry out a comprehensive economic evaluation study for any petroleum related project including risk analysis and sensitivity study using spreadsheet; and
- contribute to the decision-making process for any petroleum related project.

### COURSE CONTENT

**Day 1** – Introduction to Risk Analysis

**Day 2** - Geotechnical Estimates under Uncertainty

**Day 3** - Risk Analysis of Exploration Prospects

**Day 4** - Chance of Prospect Success

**Day 5** - Economic Analysis of Exploration Ventures

### TARGET AUDIENCE

Oil & Gas Field Engineers, Oil & Gas Managers, Oil & Gas Auditors, Oil & Gas Planners, & Financial Analysts

# PETROLEUM PROJECT FINANCIAL EVALUATION & COST MANAGEMENT

## OVERVIEW

This is a 5-day course that will expose the participants to petroleum financial evaluation and cost management techniques which includes the estimation of production profiles, recoverable reserves, commodity prices and project costs.

This course will explain these theoretical concepts using an interactive but yet practical approach with emphasis on the use of analytical tools.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the basic accounting concepts that guide the petroleum project phases;
- learn and have a hands-on practical experience of the various tools for making project cost evaluation;
- learn what budgeting is about and how to structure a budget for a profitable project; and
- learn the various means of financing projects in the business world.

## COURSE CONTENT

**Day 1** – Basic Accounting Concept

**Day 2** - The Basic core Elements in Project Cost Management

**Day 3** - Advanced Concepts and Tools in Project Cost Management

**Day 4** - Project Financial Appraisal Techniques and Capital Budgeting Decisions

**Day 5** - Project Financing

## TARGET AUDIENCE

Oil & Gas Field Engineers, Oil & Gas Managers, Oil & Gas Auditors, Oil & Gas Planners, and Financial Analysts



# PETROLEUM PROJECT MANAGEMENT AND RISK ANALYSIS

## OVERVIEW

Exploration and Production companies often must evaluate their potential E&P investment using proper present value analyses of expected future cash flows. From the projected cash flows and required investments, the annual rate of return and other project economic indicators can be extracted to evaluate the significance of company investment. This course provides practical guidance in the application of the techniques of the economic analysis currently used in the Oil & Gas industry.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand economic principles and its application to the oil and gas industry;
- understand basic project economics tools and how they can be used in risk assessment;
- learn about the historic nature of energy prices, risk management, the energy market pricing, forward and futures market; and
- understand Real Options and Portfolio Optimization and how they are used to decrease overall risk in the portfolio.

## COURSE CONTENT

**Day 1** - Introduction to Petroleum Economics  
Energy Project risk and Uncertainty

**Day 2** - Event Identification  
Probability Theory and Quantitative Analysis  
Decision Tree Analysis

**Day 3** - Risk Assessment  
Risk Response

**Day 4** - Monte Carlo Simulation  
Field Development, Reservoir Performance, and Surface Facilities

**Day 5**- Managing Energy Price and Volume Risks: Futures and Hedging  
Portfolio Theory and Real Options

## TARGET AUDIENCE

This program is designed specifically for energy managers, supervisors, and key employees from broad functional areas, such as finance, technology, and project development who wish to expand their knowledge of financial modeling and petroleum project economics.

# RISKS, UNCERTAINTY, AND DECISION ANALYSIS IN E&P PROJECTS

## OVERVIEW

Risks and uncertainties are interchangeably used in E&P projects. Risk and uncertainty principles impact decision making in any chosen project, as well as how they are developed and their economic performance. Therefore, improving the quality of decision is the main goal, not just understanding risk and uncertainty for their own sake.

Although probabilistic concepts and tools are commonly used to describe projects under risk and uncertainty, the principles underlying these concepts and tools are not always well understood. Upon completion of this course, participants will become more comfortable with probabilistic thinking and how it can be used to improve decision making.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- learn how to carry out investment profitability studies including all aspects of complex fiscal terms, inflation, and financing;
- understand and analyze the economic results and carry out sensitivity analysis;
- incorporate geological risk and uncertainty in the economic evaluation of exploration & Production projects; and
- learn how to develop advanced computer models for the study of Oil & Gas development projects.

## COURSE CONTENT

**Day 1** - Risk Concepts.

**Day 2** - Understanding Uncertainty.

**Day 3** - Monte Carlo Applications.

**Day 4** - Portfolio Management.

## TARGET AUDIENCE

Decision Makers, Planners, Engineers, Geoscientists, Oil & Gas Field Engineers, Oil & Gas Managers, Oil & Gas Auditors, Oil & Gas Planners, & Financial Analysts.

## FUNDAMENTALS OF GLOBAL ENERGY MARKETS

### OVERVIEW

This training course is designed to give delegates a comprehensive picture of the global energy market obtained through conventional and unconventional energy sources. The overall dynamics of global energy industry are explained with the supply-demand dynamics of fossil fuels, their price volatility, and the associated geopolitics.

The energy sources include crude oil, natural gas, coal, refined products, nuclear, and renewables – solar, wind, hydro, and biofuels. The focus on the issues to be considered on the sales, marketing, trading and special focus on the price risk management.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- gain broad perspectives of global oil and refined products sales business, supply, transportation, refining, marketing and trading;
- boost their understanding of the fundamentals of the oil business: quality, blending and valuation of crude oil for trade, freight and netback calculations, refinery margins calculations, and vessel chartering;
- master the Total barrel economics, Oil market futures, hedging and futures, and price risk management;
- evaluate the technical, commercial, legal and trading aspects of oil business with the International regulations; and
- confidently discuss the technical, commercial, contractual, legal, financial regulatory concepts and buzzwords with your peers and clients.

### COURSE CONTENT

**Day 1** - Essential Petroleum Upstream Practices

**Day 2** - Crude Oil Trading

**Day 3** - Refined Products Prices & Trading

**Day 4** - Energy Price Risk Management

**Day 5** - Legal & Regulatory Issues

### TARGET AUDIENCE

Business Development Managers, Corporate Planning Professionals, Sales, Marketing, Trading personnel, Supply Planning, Scheduling & Logistics professionals, Geoscience & Engineering professionals, Refinery professionals, Equity analyst and Bankers, and Joint Venture officers



## INTERNATIONAL OIL & GAS TRADING

### OVERVIEW

Learn to use trading and hedging to profit from, and protect against oil market movements. Setting the scene for oil trading, this training course examines markets, pricing and products to provide participants with a thorough overview of the sector. This course will explore mechanisms and tools for both physical and financial oil trading allowing unparalleled access to the world of trading, its role within the oil industry and its importance in the success of oil companies.

Participants will leave this course with a thorough understanding of the workings of the oil & Gas markets and the range of contracts, tools and techniques available to traders.

### LEARNING OBJECTIVES

At the end of the workshop, participants will be able to:

- comprehend the Brent Market and its influence on international pricing;
- position management with hedging tools;
- understand the structure of purchase/sales contracts including exposures and transaction costs;
- ensure a price risk management;
- develop successful trading strategies;
- the use of trading instruments to capture the market;
- use of Freight Forwards to manage freight risk;
- work the arbitrage; and
- trade in unstructured positions and real market.

### COURSE CONTENT

- Day 1** - Crude Oil and Product market  
Shipping & Freight
- Day 2** - Contracts  
Price Risk and Market Risk Management
- Day 3** - Crude Trading  
Developing successful trading strategies  
Negotiating term deals  
Other risks and exposures  
Arbitrage price risk management  
Payment mechanisms, letters of credit  
Counterparty selection
- Day 4** - Introduction to Advanced Instruments
- Day 5** - Case Studies and Exercises

### TARGET AUDIENCE

Traders, Refiners, Sales & Marketing Executives, Account Managers, Economists, Analysts, Risk managers, and Operations managers

## BASIC PROJECT EVALUATION METHODS

### OVERVIEW

This training course will give delegates fundamental knowledge of important economic and legal considerations when evaluating the commercial viability of oil & gas projects. It is relevant to evaluate oil & gas projects as the viability of all projects must be reviewed before execution, in order to ensure success throughout the project lifecycle, be it the development of oil & gas fields, construction of a pipeline system or the construction of a refinery.

The training course is designed to encourage participation through syndicate discussions of current global issues bordering the course content and explore business case studies designed to reinforce knowledge and skills.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the reasons for evaluating projects;
- understand different types of contracts in the oil & gas industry;
- understand the different classifications of reserves;
- understand how international economics works; and
- understand project economics analysis.

### COURSE CONTENT

**Day 1** – Nomenclature and General Principles

**Day 2** - Introduction to Project Evaluation

**Day 3** – Measures of Value and the Value of Money

**Day 4** - International Economics

**Day 5** – Case Studies: Project Economic Modelling from Scratch.

### TARGET AUDIENCE

Business Development Managers, Geoscientists and Engineers, Bankers, Accountants and Auditors, Lawyers and Law Firms' Personnel, Government Regulators, Tax and Finance Advisors, and Negotiators

## PROJECT RISK MANAGEMENT

### OVERVIEW

Understanding risk management in projects is a key skill required of all project managers. In this project risk management training course, delegates will learn how to identify, measure, and analyze risks in projects of all scales and scopes, as well as know how to measure projects from start to finish through the creation of a project risk management plan.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- prepare a risk management plan, schedule, and a risk register;
- identify project risks by using Crystal Ball and @Risk;
- integrate risk management techniques and results into a balanced project management approach;
- perform qualitative risk analysis to prioritize risks for response and monitoring;
- perform quantitative risk analysis to assess risk to the overall project cost and schedule objectives;
- incorporate expected value, probability, and distribution into your risk analysis;
- estimate and characterize the impact and timing of risks on your project;
- determine and implement appropriate risk response strategies based on risk analysis;
- monitor and control identified and emerging risks based on risk plan and project execution results; and
- Communicate risks decision and analysis effectively to all project stakeholders.

### COURSE CONTENT

**Day 1** - Risk Management Overview.

**Day 2** - Plan Risk Management, Identify Risks.

**Day 3** - Perform Quantitative and Qualitative Risk Analysis.

**Day 4** - Implement Risk Responses.

**Day 5** - Monitor Risk.

### TARGET AUDIENCE

Risk Analysts, Actuaries, Engineers, Economists, Managers, Oil & Gas Field Engineers, Oil & Gas Managers, Oil & Gas Auditors, Oil & Gas Planners, & Financial Analysts

# INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT

## OVERVIEW

This course is tailored in a stepwise approach aimed at equipping delegates with the skills needed to analyze any investment and make proper investment decision. The program will cover various investment techniques including value functions and optimization techniques (Linear Programming).

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand various techniques needed to appraise any investment;
- learn how to build various investment models;
- understand and analyze investment opportunities vis-à-vis investment returns; and
- learn state-of-the-art portfolio management techniques.

## COURSE CONTENT

**Day 1** - Decision Modeling & Portfolio Optimization Techniques

**Day 2** - Monte Carlo Simulation.

**Day 3** - Decision Tree Analysis.

**Day 4** - Decision Policy.

**Day 5** - Policy Implementation.

## TARGET AUDIENCE

Planners, Project Risk Analysts, Investors, Economists, Decision Makers, Engineers, and Project Managers.

# PETROLEUM PROJECT ECONOMICS & DECISION ANALYSIS

## OVERVIEW

Participants will learn, in a practical manner, how to analyze the financial performance of oil and gas investments from both the project and corporate reporting perspectives. They will be asked to build financial models for typical oil and gas projects, identify and incorporate all major risk components into the analysis.

A major part of the learning is achieved through team participation in a challenging “business game” setting where they must present their team’s recommendations to the Board.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- identify key elements of the decision analysis process and the respective roles of management;
- express and interpret judgments about risks and uncertainties as probability distributions and popular statistics;
- represent discrete risk events in Venn diagrams, probability trees, and joint probability tables
- solve for expected values with decision trees, payoff tables, and Monte Carlo simulation (hand calculations);
- craft and solve decision models;
- evaluate investment and design alternatives with decision tree analysis; and
- develop and solve decision trees for value of information (VOI) problems.

## COURSE CONTENT

**Day 1** - Decision Tree Analysis: decision models, value of information (a key problem type emphasized in the course), flexibility and control, project threats and opportunities.

**Day 2** - Monte Carlo Simulation: Latin hypercube sampling, portfolio problems, optimization, advantages and limitations.

**Day 3** - Decision Criteria and Policy: value measures, multiple objectives, HSE, capital constraint, risk aversion.

**Day 4** - Modeling the Decision: influence diagrams, sensitivity analysis, modeling correlations.

## DELIVERY METHOD

Lectures, discussions, syndicate work, case studies and exercises. Audio-visual aid will also be used to reinforce these learning methods.

## TARGET AUDIENCE

Managers, Geologists, Engineers, Geophysicists, Team Leaders, Economists, and Planners.

# CASH CALL MANAGEMENT IN UPSTREAM PETROLEUM VENTURES

## OVERVIEW

In petroleum exploration and production operations, it is usual for international oil and gas companies (IOCs) and national oil companies (NOCs) to collaborate in Joint Ventures (JV). This age-old arrangement is intended to, amongst other reasons, share both exploration and financial risks among participating companies. Such organizations are referred to as JV Partners while the partners choosing to manage the operations on behalf of itself and other partners is called the Operator of the JV. From time to time, the operator calls upon other JV Partners to provide funding for the operations based primarily on each partner's equity and on approved budgets. Such calls for funding are referred to as 'Cash Call'.

This course is designed as a 5-day workshop to address issues relating to project execution due to cash call delays.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand Cash Call Billing and Cost Allocation;
- understand funding Arrangement for Upstream E&P;
- understand Cash Deficit Repayment with Cash or Oil and Gas;
- learn Carried Interest in Cash Call Payment – Modified Carry Arrangement (MCA) and AF Mechanism;
- learn the implications of Negative Returns Reporting in Cash Call Billings & Cost Allocations; and
- understand Accounting for Deficit Cash Call.

## COURSE CONTENT

**Day 1** - Basis of Cash Calls in Oil & Gas E&P Operations: Background & Overview of Contract Types.

**Day 2** - JV Contract's Fiscal Policy Resulting in Cash Calls, Cash Call Quantification on Basis of Equity & Cash Call Account Reconciliation.

**Day 3** - Oil & Gas E&P JV Budgeting, JV Budgets & Cash Calling Modalities.

**Day 4** - Cash Call Accounting & Reporting, Outstanding Cash Calls (deficit) and Repayment Options.

**Day 5** - Cash Deficit Repayment with Cash or with Oil/Gas, Entitlement Oil/Gas of JV Partners & Accounting for Deficit Cash Calls.

## TARGET AUDIENCE

Accountants, Auditors, Planners, Managers, Economists, Engineers, Geoscientists, Lawyers, Management Staff, Operations, HR & Commercial Personnel.

## INTERNATIONAL OIL & GAS ACCOUNTING

### OVERVIEW

Oil & Gas Accounting delves into acquisition, exploration, development, and production activities, covering many industry-specific accounting issues. Topics covered include the successful efforts method, full cost method, reserve reporting, the unit of production method, severance taxes, take-or-pay arrangements, transfers of mineral interests, and joint interest accounting, as well as industry-specific controls that should be installed.

The training will address several issues and challenges of accounting for international E&P operations.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the fundamental oil and gas terminologies;
- recognize the contents of a lease arrangement and define the different cost classifications associated with oil and gas activities;
- recognize the various types of production and exploration costs,
- recognize the accounting for all aspects of drilling a well and subsequent well operations and identify the indicators of sufficient progress in regard to assessing the viability of a project;
- identify the appropriate costing to be used for exploration costs associated with mineral resources, as well as the indicators for when impairment testing should be conducted on mineral resources assets.
- understand and apply a series of major financial accounting principles and standards that are particularly relevant to oil and gas firms' activities;
- recognize the audit activities in which an auditor will be engaged when auditing an oil and gas firm.
- recognize the different types of controls that are specific to an oil and gas firm;
- calculate and interpret financial and operational metrics used to analyze the costs, profitability, efficiency, and value added by a firm's exploration and production activities; and
- the implications for the oil and gas industry of the IASB's project on extractive industries.

### COURSE CONTENT

- Day 1** - Overview of Oil and Gas Operations  
Overview of Oil and Gas Accounting  
Successful Efforts Method
- Day 2** - Full Cost Method  
Depreciation, Depletion, and Amortization  
Accounting for Production Costs
- Day 3** - Revenue Accounting  
Reserve Reporting  
Transfers of Mineral Interests
- Day 4** - Joint Interest Accounting  
Interest Capitalization  
Asset Retirement and Environmental Obligations  
Asset Impairment
- Day 5** - Oil and Gas Disclosures  
IFRS Accounting for Oil and Gas  
Auditor Inquiries  
Accounting Controls

### TARGET AUDIENCE

Financial Accountants, Auditors, Management Accountants, Internal and External Auditors, and Financial Analysts.

# STRATEGIC COST MANAGEMENT IN ECONOMIC DOWNTURN

## OVERVIEW

In a volatile global business environment and particularly during an economic downturn, there is intense pressure to create and deliver value to key stakeholder groups with minimum waste and maximum cost efficiency. Customers demand quality at the right price, funding providers expect a return on their investment that reflects the risks in today's global market for capital.

The most successful organizations have used strategic cost management to balance these challenging demands. This practical course provides valuable insights to how delegates can apply these cost management principles in their own organizations.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the nature of modern global competition;
- understand the nature and behavior of costs;
- understand strategies for planning and managing costs;
- learn modern techniques for strategic cost reduction; and
- learn how to overcome barriers to achieving cost reduction.

## COURSE CONTENT

**Day 1** - The Context and Drive for Cost Reduction: The global competition for customers and investors.

**Day 2** - Creating and measuring stakeholder value: The drive for quality customer service, and developing a winning business model.

**Day 3** - Building strategic capability through key resources and competences: Understanding and Planning for Cost in global business.

**Day 4** - Approaches to understanding cost behavior, and tools to analyze and forecast business costs: A framework for strategic performance management.

**Day 5** - Identifying and using appropriate cost measures and targets: A Strategic Approach to Managing and Reducing Costs.

## TARGET AUDIENCE

Cost Engineers, Facilities Engineers, Production Managers, Design Professionals and Designers, Purchasing and Supply Chain Professionals, Marketing and Sales team, Finance Heads, and Budgeting Managers.



# PROJECT MANAGEMENT FUNDAMENTALS FOR ADMINISTRATIVE PROFESSIONALS

## OVERVIEW

This training course has been specifically designed to develop the project management competency of administrative personnel; by equipping them with the skills necessary to assist those that require the service at the work place.

This training course will provide a practical approach that gives participants the basic knowledge, processes, skills, tools and techniques, recognized as best practice in the industry, that the project administrator use in order to enhance the chances of project success.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- gain insight into how projects are Initiated, planned, implemented and closed;
- get recommendations on how administrative professionals can aid the project management environment; and
- acquire project management skills that can be used by administrators immediately upon returning to office.

## COURSE CONTENT

**Day 1** - Project Management Overview, Responsibilities & Competencies of the Project Administrator, Project Management Processes, Knowledge Areas & Initiation.

**Day 2** - Competency Description, Project Management Processes, Project Management Knowledge Areas.

**Day 3** - Project Initiation, Project Planning Tools and Techniques, Project Planning.

**Day 4** - Project Execution, Monitoring & Control, Manage and coordinate project execution.

**Day 5** - Team recognition, learning for future projects.

## TARGET AUDIENCE

Project Managers, Engineers, Economists, Administrative Officer, Executives, Team Leads, Planners, and HR Managers

# DECISION ANALYSIS FOR OPERATIONS & MAINTENANCE PROFESSIONALS

## OVERVIEW

This course examines techniques for decision analysis with emphasis on prioritization and the decision-making process to be carried out by Operation & Maintenance Professionals.

The training course will enable participants to apply decision analysis tools and techniques in basic operations and maintenance activities.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the concept of decision analysis, decision making and the significance of decisions;
- understand Decision-making process, Implement Multiple Criteria Decision Analysis using the Analytic Hierarchy Process (AHP), and Risk Management through Failure Mode & Effect Analysis (FMEA);
- understand different operational research & management science methods; and
- make decision with state-of-the-art decision-making tools, and understand how to measure and rank them.

## COURSE CONTENT

**Day 1** - Introduction to Decision Making, Scope and significance of decisions

**Day 2** - The Decision-making process, Implementing Multiple Criteria Decision Analysis using the Analytic Hierarchy Process (AHP), Risk Management through Failure Mode & Effect Analysis (FMEA)

**Day 3** - Fault Tree Analysis, Risk Priority Number, the Criticality Matrix, Modeling Reliability of Systems

**Day 4** - Series and Parallel Systems, the Redundancy Concept, MRP and ERP Systems

**Day 5** - Master Production Schedule, Decision Analysis for Optimization of Maintenance Activities

## TARGET AUDIENCE

Decision Analysts, Operation and Maintenance Professionals, Managers, key Operations Supervisors, & Internal Improvement Consultants

# ECONOMICS OF INTERNATIONAL OIL & GAS CONTRACTS AND HOST GOVERNMENT AGREEMENTS

## OVERVIEW

In this training course, oil & gas fiscal systems and contractual terms which host governments use to grant Oil companies (IOCs, NOCs) the right to explore, develop and exploit oil & gas fields will be discussed in depth as well as the underlying economics of each contractual term.

By using industry case studies, realistic examples, and exercises, participants will receive a broad practical knowledge of the typical features of each contractual term and the economic impact from both the oil company's and host government's viewpoint.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the nature of international oil & gas business and the principles of E&P contracts that operate therein;
- understand the structure and benefits of different types of international contracts for petroleum exploration, development and production;
- learn the key elements of fiscal regimes – JV, PSC, RSC, IJV;
- understand the economic terms of E&P contracts and determine the economic value of various contract terms;
- understand the various concerns of both the oil companies and the Host Government while negotiating a contract (Economic and Environmental); and
- understand the parameters involved in modelling a PSC during negotiation

## COURSE CONTENT

**Day 1** – Nature of international oil & gas business

Principles and Practice of Exploration and Production (E&P) contracts  
Resources Ownership and Host Government Agreements.

**Day 2** – Types of International Oil & Gas Contracts – Exploration Phase

Types of International Oil & Gas Contracts – Development and Production Phase  
Fiscal Regimes – JV, PSC, RSC, IJV

**Day 3** – Economics of Oil & Gas Contracts

Natural Gas Vs Crude Oil  
Environmental Concerns  
Case Study Simulation I: Re-negotiating an existing Oil & Gas Contract

**Day 4** – Review of Simulation Exercise I

Simulation Exercise Continued  
Presentation by syndicate Groups  
Case Study Simulation II: Negotiating a PSC

**Day 5** – Simulation Exercise II Continued

Presentation of Exercise II  
Close-out

## TARGET AUDIENCE

Business Development Managers, Negotiators, Corporate Planning Staff, Petroleum Economists, Petroleum Engineers, Geologists, Geophysicists, Government Regulators, Exploration and Production Managers, and National Oil Managers



# LEADERSHIP & TALENT MANAGEMENT

## INCORPORATED JOINT VENTURE

### OVERVIEW

Unlike unincorporated Joint Ventures, Incorporated Joint Ventures (IJV) are a single legal entity that bring two or more companies together in an effort to resolve the huge funding gaps between the government and the international oil companies. IJVs are designed to bridge the funding gap through their access to the capital market which, by extension, gets the finance burden off the government's shoulder and helps foster efficiency.

The essence of this training is to put the provisions of the Petroleum Industry Bill (PIB) into light and see how it will help in a transition to a successful IJV in Nigeria, turning the National Oil Company into an efficient and a profit driven organization.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the differences between the JV and the IJV;
- learn the benefits of IJV and how it affects the Oil and Gas Industry;
- learn the Host Government Agreement concept and how it affects oil and gas agreements;
- learn the working of the industry and the various contractual terms there in; and
- understand the provisions of the PIB and how it relates to the IJV.

### COURSE CONTENT

**Day 1** - Introduction to Government Petroleum Regimes

**Day 2** - Host Governments Contracts

**Day 3** - Incorporated Joint Venture

**Day 4** - PIB Guidelines on Incorporated Joint Venture

### TARGET AUDIENCE

Law and Policy makers, Oil Investors, Joint Venture Accountants and Auditors, Government Regulators and Auditors, Financial Executives, Budgeting Officers, Taxation & Reporting Executives, Administrative Officers, and JV Executives

# ANALYSIS OF INTERNATIONAL OIL & GAS CONTRACTS

## OVERVIEW

Analysis of International Oil & Gas Contracts incorporates all the types of Oil & Gas contracts used globally with each contract type evaluated and discussed. This course covers the legal, economic & financial, risk and non-financial features that are involved in Oil & Gas contracts.

The training course will enable participants to understand the key concepts in the international contractual terms and their involvement in negotiating and drafting oil & gas contracts.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- learn how to distinguish between the various types of contracts;
- know to determine the economic values of a contract;
- learn the legal and regulatory framework of the oil and gas industry in terms of the contractual arrangements;
- learn how to manage the economics of contracts, source of funding, and how to deal with risks and uncertainty;
- learn about the national policies and contract commitment for employment, training, local content development, and HSE compliance; and
- understand the gas provision in contracts and ethics involved in international contract agreements.

## COURSE CONTENT

**Day 1** - Introduction to Oil & Gas Contracts

**Day 2** - Oil & Gas Contract Types/Arrangements

**Day 3** - Oil & Gas Contract Analysis and Model

**Day 4** - Contract Issues (Commercial, Financial and Non-financial)

**Day 5** - Gas provisions and Ethics in International Petroleum Contracts/Agreements

## TARGET AUDIENCE

Exploration and Production managers, National Oil Companies Managers, Government Representatives, Legal Managers and Counsel, Contract Administrators and Managers and Project, and General Management.

## BASIC OIL & GAS LAWS IN NIGERIA

### OVERVIEW

Basic Oil and Gas Laws in Nigeria simply highlights the legal and regulatory frameworks governing the activities in the oil and gas industry in the country. It comprises of the laws and policies guiding the oil and gas operations, fiscal regimes, contract agreements and environmental protection.

The training course will provide participants with a clear understanding of the law with respect to the oil and gas industry in Nigeria via the various statutes and regulatory institutions.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn about the various regulatory institutions and their roles;
- learn about the laws guiding Oil & Gas operations in the Upstream, Midstream and Downstream sectors in Nigeria;
- understand the elements of fiscal regimes and Oil & Gas contract agreements that are used internationally and in Nigeria (Joint Operating Agreements (JOA), Production Sharing Contract (PSC));
- learn about the provisions on the Oil & Gas operations regarding the health, safety and environment law and policies (EGASPIN); and
- understand the provisions by Petroleum Industry Bill (PIB) on the Oil & Gas operations, environmental policies, and fiscal & contractual regimes.

### COURSE CONTENT

**Day 1** - Introduction to Oil & Gas Regulatory Framework in Nigeria

**Day 2** - Oil & Gas Operations Law and Policy

**Day 3** - Oil & Gas Fiscal regimes and Contract Agreements

**Day 4** - Health, Safety & Environment (HSE) Laws and regulations in Nigeria (EGASPIN)

**Day 5** - PIB provisions on Oil & Gas Operations, Fiscal regimes & Environmental Policies

### TARGET AUDIENCE

Law professionals, Oil and Gas Managers, Oil and Gas Administrative and Management staff, and Oil & Gas/Energy Advisors

# ENVIRONMENTAL IMPACTS OF PETROLEUM EXPLORATION ACTIVITIES

## OVERVIEW

Although Oil and Gas as an Energy resource holds immense value to the human population, its activities can sometimes pose grave environmental risk. This course is structured to evaluate and broaden perspectives on the adverse environmental impacts constituted by the operations of the petroleum industry as they relate to Human activity, Biodiversity, and the ways by which they can be mitigated.

The training course will broaden the perspectives of the participants and sharpen their knowledge repository in the area of oil and gas exploration and production sustainability.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the oil and gas value chain;
- appreciate the need for oil and gas exploration and production activities;
- understand how petroleum development activities impact the environment, with comprehensive focus on spills, flaring/venting, and emissions;
- understand how policies, management practices, and risk/environmental impact assessments can mitigate the environmental impacts of oil and gas activities; and
- explore ideas regarding oil and gas industry sustainability.

## COURSE CONTENT

**Day 1** - Overview of the Oil and Gas Exploration and Production process

**Day 2** - The Environmental Impacts of Petroleum E&P Activities

**Day 3** - Regulatory Framework and Management Practices (Policy, Environmental Impact Assessments, and Risk)

**Day 4** - Case Study: Spillages and Gas Flaring in Nigeria

**Day 5** - Moving Forward: Sustainability in the Oil & Gas Value Chain

## TARGET AUDIENCE

Oil and Gas Field Personnel, Engineers & Geologists, Technical support team, Oil and Gas Management Personnel, Oil and Gas Executives, and Environmentalists.



## PLANNING AND BUDGETING IN E&P VENTURES

### OVERVIEW

This course will expose participants to the planning and budgeting activities in E&P ventures. In the oil and gas industry, planning and execution are critical factors pivotal for the success of any oil and gas operation. From the commencement of Exploration and Production activities down to the processes of economic evaluation, contracts, project allocation and Field development planning, all these components play a very important role in the overall value chain of oil and gas operations.

The training course will avail participants with the requisite knowledge to have a fundamental understanding of planning, execution, and budgeting phases of Exploration and Production venture projects and engage them in interactive considerations on evolving industry practices.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the upstream oil and gas sector; developing required insights on the critical need to develop budgets;
- understand the concept of risk in oil and gas exploration and production activities;
- understand the budgeting process and the key strategic planning/forecasting techniques that can be used to plan, execute, and sustain E&P assets; and
- understand how software applications can be used to develop and build budgetary frameworks.

### COURSE CONTENT

**Day 1** - Exploration & Production: The Lifeblood of the Oil and Gas Upstream

**Day 2** - Planning requirements along the oil and gas exploration and supply chains

**Day 3** - Budgeting as part of the strategic and business planning cycles

**Day 4** - Forecasting and Benchmarking

**Day 5** - Production, Cost, and Price Factors

### TARGET AUDIENCE

Oil and Gas Field Personnel, Engineers, Technical support team, Oil and Gas Management Personnel, Oil and Gas Executives, and Project Management Personnel.

## FINANCING OIL AND GAS VENTURES

### OVERVIEW

Oil and Gas Projects are heavily capital intensive and for the development of any oil and gas venture, a sufficient capital base must be established to ensure the success and viability of such projects. This course is structured for participants to develop fundamental knowledge on the financing schemes of oil and gas projects; essentially, how oil and gas companies acquire and implement funds for the development of energy assets.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the basic structure of the Petroleum industry;
- know the various fund sources available to finance oil and gas projects;
- have a working understanding of Qualitative risk templates applied by lenders;
- differentiate the concepts of risk and reward motives of sponsors and lenders;
- understand the financial challenges orbiting various phases of oil and gas ventures; and
- understand the basic principles of loans, balance equity and debt.

### COURSE CONTENT

**Day 1** - Overview of the Oil and Gas value chain

**Day 2** - An Introduction to Project Financing

**Day 3** - Upstream Oil and Gas Financing

**Day 4** - Quantitative and Qualitative Risk Analysis and Mitigation

**Day 5** - Legal Issues to consider in accessing Oil and Gas Venture Funds

### TARGET AUDIENCE

Project Finance Managers, Credit Managers, Securities Managers, Corporate Banking Officers, Financial Analysts and Strategists, Strategic Planners, Senior Executives, Legal Advisors, Business Analysts, and Consultants

# MANAGING ORGANIZATIONAL VALUES & VISION

## OVERVIEW

This training course offers key concepts to building a solid foundation for a vision-driven organization and ensuring that vision is sustained permanently. The training contains valuable steps to articulating vision statements through goal setting, organizational performance, performance monitoring and performance evaluation.

The training course is designed to encourage delegate participation via group discussions of current issues bordering organizational management and business case studies designed to reinforce new knowledge and skills.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- understand more about differences between Mission, Vision, and Core Values;
- understand techniques involved in goal setting; and
- understand performance management and evaluation.

## COURSE CONTENT

**Day 1** - Organizational Mission, Vision, and Core Values.

**Day 2** - Goal setting.

**Day 3** - Performance Management Systems.

**Day 4** - Performance Appraisal Methods.

**Day 5** - Performance Evaluation.

## TARGET AUDIENCE

Talent Developers, Government officials, Management staffs, Business Owners and HR Personnel

## ADVANCED OIL & GAS FINANCIAL MANAGEMENT PROGRAM

### OVERVIEW

This course covers the advanced level of the oil and gas financial management. Participants will be equipped with knowledge of how the oil and gas funds are appropriated and allocated.

The awareness and understanding of the various financial techniques available will enable delegates to communicate better with financial professionals, within and external to their organization, and to become more effective managers. This will be achieved through the use of the tools and techniques of financial analysis and financial management; thereby, becoming better informed in using new financial skills that will help improve management decision-making.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- learn about the various options available to financing oil & gas projects;
- learn the economics of mergers and acquisition;
- learn how to evaluate the corporate financial performance; and
- use analytical tools to evaluate and interpret financial and consolidated statements.

### COURSE CONTENT

**Day 1** – Corporate Financing in the Oil & Gas Industry

**Day 2** – Project Structuring and Financing

**Day 3** – Merger and Acquisition and Corporate Financial Performance

**Day 4** – Case Study and Classwork

### TARGET AUDIENCE

Corporate Accountants, Financial Controllers, Treasury Officers, Management Accountants, Joint Venture Accountants, Auditors, Government Regulators, and Financial Investment Analysts.

## ORGANIZATIONAL BEHAVIOR MANAGEMENT

### OVERVIEW

Modern organizations face many problems, from increasing internal efficiency to improving organization effectiveness while interacting with their external environment. In all these endeavors, understanding the behavior of people is pivotal to the success of an organizations.

The purpose of this training is to familiarize participants with the field of organizational behavior by first introducing its major elements and then digging deep into the details of each.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand basic work ethics and behavior;
- learn about toxic behaviors that hinder organizational growth; and
- learn organizational behaviors that can be imbibed to foster organizational growth.

### COURSE CONTENT

**Day 1** – Introduction to Organizational Behavior

**Day 2** – Individual Characteristics

Social Processes

**Day 3** – Accomplishing Organizational Objectives

**Day 4** – Individual & Organizational Effectiveness

**Day 5** – Organizational Culture

### TARGET AUDIENCE

Managements, Team Leads, HR Personnel, and Administrative Officers

## STRATEGIC PLANNING & EXECUTION

### OVERVIEW

Implementation skills are essential throughout the organization within middle as well as senior management ranks. The fast-evolving national, international and global environment continues to pressure organizations and their managers to constantly increase their performance. This highly-interactive training course provides participants with a number of concepts and frameworks that will enable them to critically evaluate the approach of organizations in different business sectors to strategic planning and execution.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- develop a broad knowledge and critical understanding of the role of the strategic management function within organizations;
- define and to clarify the concepts of "strategic plans", "strategy implementation", and "change management";
- gain the knowledge to be able to appreciate the main methods used to formulate and implement strategy;
- use acquired knowledge to review organization practice against given theoretical models and provide considered responses to given problems; and
- Evaluate new concepts in this area and be able to illustrate essential understanding through application.

### COURSE CONTENT

**Day 1** - Introduction to strategy, planning and structure in the oil and gas industry

Industry strategists and the process model

**Day 2** - Objectives in the oil and gas industry

The oil & gas industry and the economy

**Day 3** - The oil & gas industry and the market

Internal analysis in the oil and gas industry

**Day 4** - Strategy choice in the oil and gas industry

**Day 5** - Implementation and evaluation in the oil and gas industry

### TARGET AUDIENCE

Strategists, Administrative Officers, Economist, and Managers

## FIELD DEVELOPMENT PLANNING

### OVERVIEW

Upon completion of this course, participants will understand the engineering, procurement, and construction phases, and be able to utilize fit-for purpose project management techniques and project control tools to facilitate successful project outcomes. The specific training received in schedule and cost management will help the early career project manager make the best decisions possible.

Participants will learn project management techniques that encompass the lifecycle of a field from acquisition to abandonment.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- define the engineering, procurement, and construction phases and execute them skillfully;
- identify key constraints, interfaces and develop action plans to address them;
- develop scopes of work, cost estimates, and schedules;
- prepare project execution plans; and
- utilize progress measurement and control techniques.

### COURSE CONTENT

**Day 1** - Field Development Planning, Project delivery system

**Day 2** - Organization and Resources, Engineering, and Construction

**Day 3** - Project Execution Plan, HSE and Project Risk Management

**Day 4** - Procurement and Contracting Cost Estimating

**Day 5** – Planning, Scheduling, and Progress Measurement

### TARGET AUDIENCE

Project Managers, Project Engineers, Facility Engineers, Operations Engineers, Project Controls, and Purchasing Personnel.

# INTERNATIONAL PETROLEUM AGREEMENTS & CONTRACTS MANAGEMENT

## OVERVIEW

In the Petroleum industry, International Petroleum agreements and contracts refers to a legally binding agreement between parties, based in different countries, in which they are obligated to do or not. Delegates will learn the philosophy, evolution, and fundamentals of international petroleum contracts. Participants will master many negotiating techniques which will be applied in a practical negotiating session.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- distinguish between different types of contracts;
- understand the economics terms of an E&P contract;
- determine the economic value of various contract terms; and
- negotiate and assess the value of contractual terms.

## COURSE CONTENT

**Day 1** - Types of international petroleum contracts, important principles and terms in all contracts, Host governments and contractors contract objectives

**Day 2** - Specific features of different types of contracts; dividing the production, Outline of a typical contract for E&P, Contract operating issues, Funding petroleum development programs

**Day 3** - How the contractor is paid, Contractor's risk, Contract economics

**Day 4** - Non-financial issues, Analysis of contract provisions, Model contract

**Day 5** - Natural gas production under international contracts, Negotiations workshop, Ethics in international petroleum operations

## TARGET AUDIENCE

Exploration and Production Managers, national oil company managers, government representatives, and Administrative officers.



## DATA MANAGEMENT & COMMUNICATION

### OVERVIEW

Participants will have the knowledge and tools necessary to participate in developing a structured data management framework in a practical manner to ensure business efficiency and data optimization. This course provides an understanding of essential data management, communication principles and concepts. Participants will have the opportunity to learn from presentations, exercises, and interactive discussions.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand what data management is, why it is important, understanding of data as an asset, its lifecycle, benefits of good data management, and its potential value;
- understand the core data types in the E&P industry and best practices;
- learn common data management issues and challenges, and its impact on businesses;
- understand the important components of a data management framework; and
- learn how to map issues onto a data management framework.

### COURSE CONTENT

**Day 1** - Introduction to data types: definitions

**Day 2** - Common data management issues: causes of data issues, data management best practices, business impact

**Day 3** - Overview of data management: definition, data lifecycle, importance and value of data management, benefits of good data management, business case aspects and barriers

**Day 4** - Data management framework: governance, architecture, security, reference and master data management, data quality management

### TARGET AUDIENCE

Data or Information Managers, Technical Managers and Assistants, Technologists, Geologists, and Geophysicists.

# EFFECTIVE CONTRACTOR MANAGEMENT IN MAINTENANCE AND TECHNICAL PROJECTS

## OVERVIEW

This interactive training course will explore and guarantee the importance and relevance of understanding how Contractor Management will fit into the Asset Management framework. This course will demonstrate how to properly select the best contractor and contract type that suits various sourcing strategies, including how to manage and monitor the outcome.

The course will focus on topics such as risk management, partnerships, negotiating, people management and applying contracts in a complex project environment (Turnkey contracts, PPP).

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- grasp negotiating the contract ideas;
- learn contract types in several environments;
- understand sourcing strategy within Asset Management;
- understand monitoring & managing performance and risk; and
- understand the continuous improvement aspects.

## COURSE CONTENT

**Day 1** - Contractor Management Basics, Overview of contractor management, Relationship with asset management

**Day 2** - Sourcing strategies, Risks involved – risk management, contract types for Maintenance & Technical Projects, Contracts – basic types

**Day 3** - Contracts – complex types (Turnkey, D&C, PPP), procurement aspects, choosing the right contractor

**Day 4** - Monitoring & managing contractor performance, developing the Contract & the contracting cycle

**Day 5** - Writing the contract, vendor management, people management & negotiation aspect

## TARGET AUDIENCE

Operations & Maintenance professionals, Contractors, Contract Management Teams, Shutdown and Turnaround Management Teams.

# OPERATION, DIAGNOSTICS & MAINTENANCE FOR OIL & GAS PRODUCTION

## OVERVIEW

This course is structured to provide the delegates with the appropriate mix of best practice and technical fundamentals to maximize their learning in Oil & Gas Process plant design, rotating equipment, pressure vessels, above-ground atmospheric storage tanks, and piping systems. Good design and construction are required as these equipment and piping systems are subject to a number of damage mechanisms throughout their service life that could result in serious or even catastrophic failures.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- design, operate and maintain rotating equipment;
- design, operate and maintain pressure equipment and tankage, materials and construction;
- understand system design integration; and
- understand equipment specification and management.

## COURSE CONTENT

**Day 1** - Rotating Equipment, Pumps & Compressors

**Day 2** - Pump & Compressor Performance in Static Plant

**Day 3** - Materials & Construction, System Design, Process Flow Schemes & Process Engineering Flow Schemes

**Day 4** - Commissioning, Specifications, Procurement Requirements

**Day 5** - KPIs for the mechanical engineer, Benchmarking

## TARGET AUDIENCE

Operations & Maintenance professionals, Managers, Operations Engineers, Maintenance Engineers, Engineering Supervisors and Team Leaders.

# COMPETENCY DEVELOPMENT FOR SUPERVISORY EXCELLENCE IN OIL AND GAS PETRO-CHEMICAL INDUSTRY

## OVERVIEW

This course has been specifically designed to develop the competency of supervisory personnel in the oil and gas sectors by equipping them with knowledge, skills and understanding to achieve Supervisory Excellence in this critical and high-hazard industry. Participants will learn about utilizing management and leadership techniques to identify risks, solve problems, delegate, communicate effectively, and develop yourself.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the unique and important role of the supervisor as a master key for organizational success and development;
- analyze risks, problems and provide effective solutions;
- delegate skills and control meetings;
- exhibit excellent interpersonal and communications skills techniques;
- understand methods in achieving the safety culture and Target Zero; and
- develop people and build great team performance.

## COURSE CONTENT

**Day 1** - Understanding the role of the Supervisor in determining success and managerial development in an organization.

**Day 2** - Creating vision and initiatives, Inspiring change and innovations leading to continuous improvement, Personal Accountability, Reliability, Integrity and Honesty

**Day 3** - Problem solving, decision Making and delegation, analyzing situations and data, Lateral and Vertical problem solving

**Day 4** - Decision making process, Delegation skills, assessing risks and analyzing problems

**Day 5** - Mastering the art of Delegation and motivation

## TARGET AUDIENCE

New & Experienced Supervisors, Team Leaders & Line Managers, Projects & Process Engineers, Managers & Senior Engineers

# PROCUREMENT PLANNING AND CONTRACT MANAGEMENT

## OVERVIEW

Difficulties and delays often encountered during project implementation have been found to result from insufficient knowledge of procurement practices and procedures. Reforms in public procurement practices have brought to the fore, the importance of good procurement and contract management practices.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- discuss the importance of procurement in development projects;
- explain the procurement process;
- prepare a bidding document;
- evaluate bids; and
- implement the contracts.

## COURSE CONTENT

**Day 1** - Procurement and Contract Management: An Overview  
Procurement Reforms in Nigeria

**Day 2** - Procurement Process, Planning and Methods  
Bid Documents, Bid Opening, Examination and Evaluation Preparation of Functional & Master Budgets

**Day 3** - Guidelines on Selection of Consultants  
Preparations of Request for Proposals and Quotations

**Day 4** - Evaluation of Proposals  
Contract Award, Implementation and Managements

**Day 5** - Payment Procedures and Practice  
Issues and Challenges in Public Procurement and Contract Management in Nigeria

## TARGET AUDIENCE

Procurement Officers and Contract Managers.

# HIRING AND RECRUITMENT IN HUMAN RESOURCE

## OVERVIEW

Hiring and recruitment of the best and brightest workers is one of the topmost priorities of any organization as this will enable it to achieve strategic goals. It involves the overall process of attracting and selecting suitable candidates for various job roles within an organization.

This training course will enable participants to discover the importance of linking recruitment process with company strategy as well as leveraging on social media and hiring analytics for efficient recruitment.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- learn how to align recruitment process with company goals and objectives;
- develop effective recruitment strategies;
- learn how to use social media and hire analytics for better selection of suitable candidates; and
- learn about the steps involved in a selection process.

## COURSE CONTENT

**Day 1** – Alignment of Recruitment Strategies with Company Objectives

**Day 2** – Pre-hire Assessment and Review of Candidates' documents

**Day 3** – Use of Social Media and Hire Analytics in Recruitment

**Day 4** – Candidate Evaluation and Selection of the Best.

## TARGET AUDIENCE

HR Managers, HR Personnel, and Head of Company Departments/Units.

## LEGAL MATTERS IN HUMAN RESOURCE MANAGEMENT

### OVERVIEW

The field of human resources management is greatly influenced and shaped by the state and federal laws governing employment issues. Indeed, regulations and laws govern all aspects of human resource management from recruitment to placement, development, and compensation.

This Course will expose participants to the legal responsibilities and provisions in Human Resource Management.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the legal functions in the Human Resource environment;
- ensure HR contracts and policies is in alignment with Labor laws;
- understand legal procedures in dismissing an incompetent or underperforming staff; and
- learn about the Health and Safety Laws within an organization and how to enforce them.

### COURSE CONTENT

**Day 1** – Employee Rights and its Infringement

**Day 2** – Law and Recruitment

**Day 3** – Dealing with Inappropriate Work Place Behavior

**Day 4** – Employee Health and Safety Laws

### TARGET AUDIENCE

HR Professionals, Company Managers, and Heads of Department/Units

## INTERVIEWING SKILLS

### OVERVIEW

Interviewing skill training focuses on the skills required to conduct engaging interviews that include effective questioning. This allows a hiring manager or interviewer to ensure the best practices are followed to hire the right candidates with the applicable skills, behavior and mind-set.

This will ensure the candidates fit in perfectly with the job-role and culture of the team and organization.

### LEARNING OBJECTIVES

At the end of the training, the participant will:

- learn how best to engage candidate in an interview;
- learn how best to recruit candidates who will suit the working culture of the organization; and
- learn various methodologies needed to conduct a successful interview.

### COURSE CONTENT

**Day 1** – Developing Hiring Skills

**Day 2** – Structure and Methodology of an Interview

**Day 3** – Progressive Stages of an Interview

**Day 4** – Probing Skills

**Day 5** – Key areas of Interviewing

### TARGET AUDIENCE

HR Managers, Group and Team Leaders, Business Owners, and Head of Departments.



# BUSINESS ETHICS

## OVERVIEW

Firms and corporations do business in a social and natural environment and should be accountable to the society in which they operate and grow.

Business ethics are moral rules and standards which guide business decisions, actions and judgement. Every company should have an ethical code, which contains details of how every employee is expected to act and behave when representing the company's interest.

## LEARNING OBJECTIVES

At the end of the training, the participant will:

- learn how to build good interpersonal skills;
- learn the importance of values in business ethics;
- learn how to promote business sustainability through a good CSR culture; and
- learn how to conduct a fail-proof social audit.

## COURSE CONTENT

**Day 1** – The Concept of Ethics.

**Day 2** – Tools of Ethics.

**Day 3** – Moral Rules in Human Relations.

**Day 4** – Corporate of Social Responsibility.

**Day 5** – Social Audit.

## TARGET AUDIENCE

HR Managers, Business Owners, and Government Officials.

## ORGANIZATIONAL DEVELOPMENT.

### OVERVIEW

Business, as we know it, is a diverse and multi-faceted machine comprised of many moving parts working together to sustain a complex whole. As such, effective management of protocols and processes in these organizations need to be upheld to the highest possible standards. This training on Organizational Management seeks to prepare participants for managerial and administrative positions geared towards advancing the ideals of their organizations. This will positively strengthen the decision making and strategic orientation acumen of participants and ultimately result in improved organizational efficiency.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the key tenets of organizational practice;
- learn the core principles of 21<sup>st</sup> century Leadership;
- understand organizational hierarchies and learn the foundations of organizational efficiency;
- explore the topic of resource management and employee interfacing to effectively make pivotal organizational decisions; and
- pair teamwork and organization hierarchies with organizational efficiency and internal growth.

### COURSE CONTENT

**Day 1** – Global Organizational Practice: Standards and Peculiarities

**Day 2** – Principles of Modern Leadership: A guide to institutional awareness and managerial growth

**Day 3** – Organizational Hierarchies, Team Performance Evaluation and Organizational Efficiencies

**Day 4** – Case Study: S.W.O.T analysis on various organizational cadres around the world

**Day 5** – Workshop: Building Organizational Efficiency one individual at a time

### TARGET AUDIENCE

Executives and Managers, Administrative staff, Recruitment officers and HR Personnel, and Project Managers

## EMPLOYEE ENGAGEMENT

### OVERVIEW

The productivity of an organization is not defined by profit margins or vast scenes of asset accumulation, but by its ability to effectively develop and nurture its human assets. This course on Employee Engagement seeks to create clear principles through which human capital can be decisively developed for short- and long-term organizational prosperity. At the end of this training, delegates will be well equipped with the requisite capacity to understand organizational work bases and draft the right strategies to facilitate employee engagement for organizational growth and development.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the strategic nature of HR;
- understand the process of formulating and implementing organizational development strategy;
- explore the meaning and significance of human capital management (HCM);
- explore the approaches to the development of knowledge, performance, resource, talent, and rewards management strategies;
- understand and contextualize the meaning and importance of employee engagement; and
- understand the meaning, aims, and philosophy of strategic learning and development.

### COURSE CONTENT

**Day 1** – The Organization: Contemporary issues within and without

**Day 2** – Human Capital Management (HCM) Strategies

**Day 3** – Talent, Resource, Performance, and Reward Management strategies for Employee Engagement

**Day 4** – Case Study: A look at various Employee Engagement strategies implemented by companies around the globe.

**Day 5** – Workshop: Exploring ways to actively foster employee engagement.

### TARGET AUDIENCE

HR directors, Heads of HR functions, HR business partners, Senior HR executives, Managers, Advisors, Chief officers, Chairpersons, Board members, Company directors, and Heads of Departments.

# PERFORMANCE MANAGEMENT & APPRAISALS

## OVERVIEW

This training course aims at providing a practical performance appraisal training to help participants acquire critical knowledge, skills and confidence to undertake effective performance appraisal discussions with their subordinates and to improve the general performance and the management of any organization they head or operate.

## LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the benefits of Performance Management and Appraisals as a crucial management vehicle for achieving organization goals;
- review the performance appraisal framework and timelines;
- have a basic understanding of related tools and techniques in performance appraisal; and
- know how to develop and formulate goals and Key Performance Indicators (KPIs), competencies, and performance standard for the overall organizational growth.

## COURSE CONTENT

**Day 1** – Principles of effective appraisals

**Day 2** – Setting SMART Objectives

The appraisal meeting

**Day 3** – Appraisal skills

Practicing the key skills in conducting an appraisal

**Day 4** - Performance appraisal documentation and follow up

**Day 5** – Case Study

## TARGET AUDIENCE

Managers, Directors, HR Managers, and Group Leaders.

The background image is a stylized, futuristic cityscape at night. It features a grid of glowing lines overlaid on a dark blue background. In the foreground, there are several large, glowing spheres or domes. In the background, there are tall, thin structures that look like towers or spires. The overall color palette is dominated by dark blues and purples, with bright white and yellow highlights from the grid and lights. The word "WORKSHOPS" is centered in the middle of the image in a white, sans-serif font.

# WORKSHOPS

## OIL AND GAS NEGOTIATION STRATEGIES

### OVERVIEW

A well coherent strategy is a sine-qua-non for an effective negotiation. Just as a good strategy has its own merits, so also, a bad strategy has its own demerits. Our ability to differentiate between these two and to align our thoughts towards a sustainable line of action sets the organization apart for great achievements.

This workshop sets out to expose participants to the basic negotiating skills and some techniques that will guide them in making strategic decisions such as the Kernel and Game Theory.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the role of Negotiation in Decision Making;
- effectively communicate and maintain good negotiation skills with business partners;
- have a working experience of Game Theory and how it operates in the business world; and
- learn various negotiation models using various analytical toolkits.

### COURSE CONTENT

**Day 1** – The Mindset of the Negotiator

**Day 2** – Mechanisms for Effective Negotiations

**Day 3** – Case Study – Game Theory

**Day 4** – Negotiators Toolkits

**Day 5** – Code of Ethics, Integrity & Principled Negotiations

### TARGET AUDIENCE

Corporate Accountants, Financial Controllers, Treasury Officers, Management Accountants, Joint Venture Accountants, Auditors, Government Regulators, and Financial Investment Analysts.

## PROJECT PORTFOLIO MANAGEMENT

### OVERVIEW

In this course, participants will learn what it takes to maximize the number and strategic value of the projects that their organizations undertake. This course is relevant for anyone who is involved in the development and execution of organizational strategy.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- acquire basic Project Portfolio Management skills;
- grow, stabilize or contract business in a structural, defensible manner;
- drive Portfolio Management with strategic and financial intent;
- quantify development and commercialization options with Decision Trees;
- validate data with effective facilitation and elicitation techniques;
- decompose Project Risk & assess probability of success;
- forecast project sales and generate risk-adjustment valuation;
- prioritize projects, optimize and balance portfolios;
- enable effective resource management with simulations and optimization;
- analyze Portfolio smartly to enable efficient decision making;
- select the right Portfolio Management engine for your organization; and
- use Tree Plan, Solver, @Risk or Crystal Ball software to manage Portfolios.

### COURSE CONTENT

**Day 1** – Risk Exposure

**Day 2** – Project, Program & Project Portfolio Risks

**Day 3** – Risk Management (Overview, Framework & Governance)

**Day 4** – Risk, Organizational Policy, Tolerance, Maturity level & Ad hoc Reporting

**Day 5** – Categorizing Risk

- Risk Analysis (Quantitative & Qualitative)
- Risk Response Management
- Monitoring & Controlling Risk

### TARGET AUDIENCE

Corporate Accountants, Financial Controllers, Treasury Officers, Management Accountants, Joint Venture Accountants, Auditors, Government Regulators, and Financial Investment Analysts

## BUDGETING AND BUDGETARY CONTROL

### OVERVIEW

Budgeting is a core financial planning function. It is designed to direct efforts, streamline activities, and provide the basis for control and evaluation. The budget is an important tool for organizational effectiveness and service delivery. With increased pressure in the environment, the function has changed significantly and calls for appropriate techniques and competence.

This workshop is designed to equip participants with the competencies required to effectively carry out the budgeting and budgetary control functions in the public and private sectors of the Nigerian economy.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- use budgeting as a tool for planning, coordinating, and controlling;
- apply different budgeting techniques;
- evaluate the role of budgeting in decision making processes;
- identify the main problems encountered in budgeting and proffer solutions;
- prepare functional, cash, and master budgets; and
- apply computer-based budgeting procedures

### COURSE CONTENT

**Day 1** - Budgeting and Budgetary Control: An Overview

The Role of Budgeting in Decision Making

**Day 2** - Types and Techniques of Budgeting

Budget Preparation Process

**Day 3** - Cash Budget Preparation

Preparation of Functional and Master Budgets

**Day 4** - Budgetary Control and Responsibility Accounting

Capital Budgeting Techniques

**Day 5** - Conditions for Successful Budgeting

Budgeting Transparency and Accountability

### TARGET AUDIENCE

Heads of Departments, Budget Controllers, Finance and Accounts Directors, Managers, Budget and Accounts Officers and Supervisors, Local Government Chairmen, Treasurers, Accountants, Budget Analysts, and Consultants.



# DATA ANALYSIS, MONTE CARLO SIMULATIONS, INTERPRETATION AND MANAGEMENT

## OVERVIEW

Data analysis and interpretation are critical aspects of evidence-based policy decision making. For data to be useful, it must be correctly processed, analyzed and interpreted to form evidence-based decision making.

This workshop is designed to equip and build capacity of planning and research officers to apply various techniques for data analysis and interpretation.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- examine the importance of data analysis and interpretation for policy making;
- describe the processes involved in preparing data for analysis;
- identify methods of data analysis and interpretation;
- apply various methods in practical data; and
- interpret the analyzed data and its implications for policy making.

## COURSE CONTENT

**Day 1** - Framework for Data Analysis and Interpretation

Data Analysis for Planning

**Day 2** - Data Editing/Coding, Capture/Entry and Cleaning

Testing Data Reliability and Validity

**Day 3** - Data Organization and Data Mining

Statistical Estimation of Data: Techniques of Data Analysis and Interpretation

**Day 4** - Evidence-Based Decision Making

Tabulation Plan and Reporting

**Day 5** - ICT Application for Data Analysis and Simulations using E-views, MS-Excel and SPSS

## TARGET AUDIENCE

Research Officers, Economists, Academics, Econometricians, Planning Officers, and Policy Analysts.

# ECONOMIC PLANNING AND BUDGET / COST CONTROL MANAGEMENT

## OVERVIEW

Most of the current economic challenges being experienced in Nigeria are as a result of absence of effective planning and poor budgeting practices in the past. To address these challenges and ensure long term economic prosperity, effective planning and budgeting needs to be practiced.

It is expedient that officers and those who provide inputs into the process of planning and budgeting be equipped with necessary tools and techniques to enhance their skills for better performance.

## LEARNING OBJECTIVES

At the end of the workshop, participants will be able to:

- explain the concepts, types and significance of plans and budgets;
- articulate the elements of the macroeconomic framework for planning and budgeting in Nigeria;
- describe the process of utilizing a medium-term expenditure framework (MTEF); and
- apply various approaches to enhance stakeholders' participation in planning and budgeting.

## COURSE CONTENT

- Day 1** - Concepts, Types and Roles of Plans and Budget  
Development Planning and Budgeting Experience in Nigeria
- Day 2** - Intergovernmental Fiscal Relations and Public Financial Management  
Macroeconomic Framework for Planning and Budgeting
- Day 3** - MTSS/MTEF and Budget Planning  
Zero-Based Budgeting
- Day 4** - Gender-Responsive Budgeting  
Participatory Planning and Budgeting
- Day 5** - Monitoring and Evaluation of Plans and Budget  
Sources of Financing Budgets  
Cost Control Management

## TARGET AUDIENCE

Planning and Budget Officers, Cost Control Officers, and Cost Engineers

## PRE-RETIREMENT AND INVESTMENT TRAINING

### OVERVIEW

The growing sophistication and complexity of Nigeria's socio-economic environment has made pre-retirement planning a key issue in corporate responsibilities. There are opportunities as well as difficulties in life after retirement, depending on how one has planned or not planned for it.

This workshop is designed to equip participants with relevant skills and exposure on how to manage their lives after retirement.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand and examine the concept and processes of retirement;
- understand and examine the importance of relationship management and networking;
- prepare personal financial plans;
- apply time management for personal effectiveness; and
- identify post-retirement options and opportunities.

### COURSE CONTENT

#### Day 1 - Perspectives on Retirement

Introduction to Entrepreneurship

#### Day 2 - Relations Management and Networking

Personal Financial Planning

Pension Fund Management

#### Day 3 - Basic Record Keeping and Accounting

Appraisal of the Nigerian Business Environment

Health and Wellness in Retirement

#### Day 4 - Business Ideas and Investment Opportunities

Personal Income Management

#### Day 5 - Business Plan

Field Visit

### TARGET AUDIENCE

Officers who are about to retire, senior and middle-level Officers.

## PANEL DATA MODELS

### OVERVIEW

Panel data modeling provides a means to estimate and test relations when there are samples containing a time series of observations for a cross section of individuals, firms, markets, countries, etc. Current treatment for a selection of major topics will be presented, including endogeneity, serial correlation, stationarity and in addition to more traditional panel data techniques.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- specify and estimate panel data models;
- perform relevant diagnostic tests for panel data models;
- apply panel data models for policy decisions; and
- deploy E-views and Stata for panel models estimation

### COURSE CONTENT

**Day 1** - Introduction to Panel Data Models

Introduction to E-views and Stata

**Day 2** - Traditional Panel Data Model and Diagnostic Testing

Pooled, Fixed and Random Effects Models

Choosing between the Fixed and Random Effects: The Hausman Test and the Breusch and Pagan (LM) Test

**Day 3** - Dynamic Panel Data Models and Diagnostic Testing

Difference GMM Estimator (Arellano and Bond)

System GMM Estimator (Blundell and Bond)

Test of Hypotheses and Diagnostics: Hansen Test and Sargan Tests

**Day 4** - Non-Stationary Panel Data

Panel Unit Root Tests and Co-integration

**Day 5** - Panel VAR, VECM Models and Causality

### TARGET AUDIENCE

Econometricians, Research Officers, Economists, Statisticians, Academics, Planning Officers and Policy Analysts in both public and private sectors.

## TIME SERIES MODELLING AND FORECASTING

### OVERVIEW

Time Series Econometrics is one of the tools used by economists and other social scientists to analyze and explain various socio-economic issues in time dimension. Problems encountered by economists in time-series application are the presence of unit roots in the data.

This workshop is designed to equip participants with theoretical and applied practical skills in time series econometrics.

### LEARNING OBJECTIVES

At the end of the workshop, participants will be able to:

- discuss concepts in time series analysis;
- conduct research involving univariate and multivariate time series models for policy decisions;
- apply E-views and Stata for macroeconomic and financial Time Series Modelling and Forecasting; and
- perform relevant diagnostic tests.

### COURSE CONTENT

**Day 1** - Introduction to Time Series Analysis and Modeling

**Day 2** - Regression Analysis and Relaxing the Assumptions of Classical Linear Regression Model (CLRM)  
Introduction to E-views and Stata

**Day 3** - ARIMA Models and the Box-Jenkins Methodology  
Multivariate Time Series Models

**Day 4** - Unit Roots, Stationarity, Cointegration and Error Correction Models

**Day 5** - Modeling the Variance: The ARCH and GARCH Models

### TARGET AUDIENCE

Researchers, Econometricians, Business Managers, Financial Marketers, Development Economists as well as international Trade and Finance Analysts from both the public and private sectors.

## ZERO-BASED BUDGETING SYSTEM

### OVERVIEW

The need for an effective and efficient accounting system in the public sector cannot be overemphasized, particularly with the current economic restructuring and transformation in the country. Therefore, operating an efficient budgetary system and managing financial resources require relevant competence and framework.

Public sector establishments are expected to minimize bureaucracy and related overheads, and manage their financial resources more competently to avoid project failure and abandonment. This workshop is designed to equip participants with the competencies and skills required to effectively operate the Zero-Based Budgeting Framework in their respective organizations.

### LEARNING OBJECTIVES

At the end of this workshop, participants will:

- understand the concept and principles of Zero-Based Budgeting;
- understand the process of utilizing and linking the Zero-Based Budgeting into Medium Term Expenditure Framework;
- learn how to use the Zero-Based Budget as a tool for planning, implementing, and controlling activities;
- understand the framework for Zero-Based Budgeting; and
- develop budget monitoring and evaluation frameworks

### COURSE CONTENT

**Day 1** - Overview of Budget Management in a Democratic Dispensation

Performance Management Framework in the Public Sector: Target Setting and Key Performance Indicators

**Day 2** - Concept and Principles of Zero-Based Budgeting

MTSS/MTEF and Budget Planning

**Day 3** - Framework for Zero-Based Budgeting

Capital Budgeting Processes and the Zero-Based Budgeting System

**Day 4** - Costing and Funding Plans and Budgets

Project Appraisal Methodology: Tools and Techniques

**Day 5** - Procurement Planning and Budget Implementation

Budget Monitoring, Evaluation, and Reporting

### TARGET AUDIENCE

Planning and Budget Officers at the Federal, State, and Local Government levels, Service Managers, Accountants and Civil Societies interested in Budget Matters

## STRATEGIC MANAGEMENT (PLANNING AND IMPLEMENTATION)

### OVERVIEW

A strategic management process helps an organization and, in particular, its leadership, to think about and plan for its future existence which in turn will result in greater operational efficiency, market share and profitability. Participants will learn how to utilize management and leadership techniques such as organizational culture to identify risks, resolve conflicts, delegate, communicate effectively, and meet organizational objectives as well as create a healthy working environment.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- appraise the vision, mission, goals, and objectives of their organizations;
- conduct environmental analysis;
- apply strategic management tools for goal achievement;
- produce functional strategic plans;
- implement strategic plans for effective change; and
- evaluate the strategic plans of their organizations.

### COURSE CONTENT

#### Day 1 - Strategic Planning: An Overview

Vision, Mission, Values, Goals, and Objectives of an Organization

#### Day 2 - Environmental Analysis

Development of Strategic Options and Choices

#### Day 3 - Activity Planning

Strategic Plan Implementation Techniques and Processes

#### Day 4 - Strategic Plan: Financing and Implementation Challenges

Change Management Strategies

#### Day 5 - Evaluating Strategic Plans for change

### TARGET AUDIENCE

Chief Executives, Directors, General Managers, Managers, Management Consultants, Advisers to Chief Executives, Government functionaries and Planning Officers at all Levels.

# FINANCIAL PLANNING, FINANCIAL MODELING AND BUDGETING

## OVERVIEW

Budgeting is a core planning function designed to direct efforts, streamline activities, and provide the basis of control and evaluation. The budget is an important tool for organizational effectiveness and service delivery. With increased pressure in the work environment to drive profitability and reduce cost, the functions of personnel have changed significantly calling for appropriate techniques and competence in financial planning and budgeting.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- prepare functional cash and master budgets;
- use the budget as a tool for planning, coordinating and controlling activities;
- apply different budgeting techniques;
- identify the main problems encountered in budgeting and proffer solutions;
- evaluate the role of budgeting in the decision-making process; and
- apply computer-based budgeting procedures.

## COURSE CONTENT

### Day 1 - Budgeting and Budgetary Control: An Overview

The Role of Budgeting in Decision Making

### Day 2 - The Budget Preparation Process

Cash Budget Preparation

Preparation of Functional and Master Budgets

### Day 3 - Types and Techniques of Budgeting

Budgetary Control and Responsibility Accounting

Staff Audit as Basis for Budgeting

### Day 4 - Capital Budgeting Techniques

Conditions for Successful Budgeting

### Day 5 - Budgeting Transparency and Accountability

Computer Application to Budgeting

## TARGET AUDIENCE

Heads of Department, Division and Unit; Budget Controllers; Finance and Accounts Directors, Managers and Officers; Budget and Accounts Officers, Supervisors; Management and Program Accountants, Local Government Chairmen, Treasurers, Accountants and Budget Officers, Budget Analysts, and Consultants.



# GEOCHEMICAL TECHNIQUES FOR SOLVING RESERVOIR MANAGEMENT AND FIELD DEVELOPMENT PROBLEMS

## OVERVIEW

During field development and production, numerous problems can be solved through integration of geochemical, geological, and engineering data. Geochemistry and geochemical approaches for solving these problems are appealing because they are functional, affordable and provide an independent line of evidence that can help resolve ambiguous geological or engineering data.

This workshop explains how geochemistry complements other reservoir management tools. Case studies and exercises illustrate key points. Computer-based exercises illustrate the utility of certain key software packages. Sampling pitfalls and sources of contamination are discussed.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- use mud gas isotopes to identify and characterize pay zones; and
- use the geochemistry of produced fluids (oil, gas, water) and/or core material to: identify missed pay, assess reservoir compartmentalization, allocate commingled production, identify completion problems (tubing leaks, poor cement jobs, etc.), characterize induced fractures (e.g., fracture height), monitor the progression of floods (water, gas, or steam), predict vertical and lateral variations in fluid viscosity and gravity, and identify the geological processes which control fluid properties in a given field.

## COURSE CONTENT

**Day 1** - Using fluid compositions as natural tracers for tracking fluid movement and compartmentalization

**Day 2** - Understanding processes that cause compositional differences between fluids (e.g., differences in source faces, source maturity, biodegradation, water washing, evaporative fractionation, etc.)

**Day 3** - Integrating geochemical, geological, and engineering data to identify missed pay, characterize reservoir compartmentalization, allocate commingled production, identify well completion problems, predict fluid viscosity/gravity, and monitor floods

**Day 4** - Basics of oil, water, gas, and mud gas compositional analyses

## TARGET AUDIENCE

Development Geologists, Petroleum Engineers, Managers, Facilities Engineer, and Technical Personnel.

## ENVIRONMENTAL MANAGEMENT SYSTEMS – A DEVELOPMENT WORKSHOP

### OVERVIEW

Since its launch in 1996, more than 250,000 organizations around the world have become externally certified to ISO 14001, the leading international standard and specification for environmental management systems (EMS). This workshop provides the learning and copyright-free template documents necessary for developing and implementing an ISO 14001-based EMS for your own facility(ies). In this workshop, site plans and process flowcharts will be used in a series of hands-on exercises to stimulate participants activity throughout the class. Arrangements for external audit by a certification body is left to the choice, convenience, and timing of the participant's organization.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand environmental management system ISO 14001;
- learn how to assess the major areas of operational interaction with the environment;
- be familiarized with corporate and legal requirements for environmental compliance;
- learn the skills to plan and develop a documented EMS: Planning for EMS (allocating resources and developing an EMS schedule);
- identify and prioritize the environmental aspects and impacts of operations;
- develop and plan matrices for significant aspects by setting objectives, targets, management programs, and KPIs;
- apply EMS to sample processes in various operational modes (normal, abnormal (start-up, shutdown), and emergency using process flow diagrams;
- modify emergency responses to accommodate EMS; and
- learn how to prepare a draft EMS manual based on our templates.

### COURSE CONTENT

**Day1** - Business risk and the environment

**Day2** - Management systems and ISO 14001, Environmental policy

**Day 3** - EMS planning - aspects, impacts, legal, and other requirements, Resources and training

**Day 4** - Communication, documentation, and document control, Monitoring and measurement

**Day 5** - EMS auditing and environmental improvement

### TARGET AUDIENCE

Business executives, operations personnel, administrative personnel, Management staff, HSE and Project Management Personnel.



# GEOLOGY & GEOPHYSICS (G & G)

## BASICS OF SUBSURFACE GEOLOGIC METHODS

### OVERVIEW

The Basics of Subsurface Geologic Methods training is designed to equip participants with the capacity to understand the basic principles and techniques involving subsurface geology and geologic phenomena. This course addresses the pertinent topics involved in subsurface geology exploration for the purpose of facilitating upstream oil and gas exploration, as well as fostering other activities of interest such as mineral mining and environmental examination.

### LEARNING OBJECTIVES

At the end of the training, participants will:

- understand the interpretation of stratigraphic, structural, and economic values below the earth's surface;
- understand and differentiate the general working principles of geologic survey methods and apply obtained comprehension of geological phenomena in understanding to oil and gas/mineral exploration;
- learn miscellaneous subsurface geologic methods pertinent in industry such as: Directional drilling, Geochemical methods, Coring and Reservoir rock analysis and examination, etcetera; and
- understand the pertinent application of subsurface geologic methods to various fields of study including Petroleum Engineering, Civil Engineering, Geophysics, and Mining Geology.

### COURSE CONTENT

**Day 1** – Introduction to Subsurface Geology

**Day 2** – Subsurface Survey Methods: Subsurface Logging and Laboratory methods

**Day 3** – Subsurface Methods: Controlled Directional Drilling, Oil-Well Surveying, Coring Techniques, Geochemical methods.

**Day 4** – Subsurface Maps and Illustrations

**Day 5** – Practical Applications of Subsurface Geologic Methods: Upstream exploration, Geophysics, Mining Geology, and Civil Engineering.

### TARGET AUDIENCE

Geologists, Engineers, Oil and Gas Field Personnel, and Technical support team.

# BASIC PETROLEUM GEOLOGY

## OVERVIEW

Where does petroleum come from? How long has it been around and how was it formed? Can petroleum be found in any kind of rock? These are basic questions about the petroleum process and this course seeks to answer these questions. The course is structured and arranged so that non-technical members and candidates can understand the geologic process of petroleum formation.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the fundamentals of rock formation and deformation and the types of rocks;
- understand Plate tectonics, geological time and how it plays a huge role in Petroleum accumulation, migration and trapping;
- understand the fundamental characteristics of various depositional environments and reservoirs; and
- recognize reservoir characteristics based on the depositional area and the concept of reservoir heterogeneity.

## COURSE CONTENT

**Day 1** - Minerals and rocks & Plate tectonics.

**Day 2** - Geological time & Weathering and erosion.

**Day 3** - Deposition & Diagenesis.

**Day 4** - Reservoirs, Structural geology and petroleum.

**Day 5** - Origin, Migration, and Trapping of petroleum.

## TARGET AUDIENCE

Heads of Department, Division and Unit; Budget Controllers; Finance and Accounts Directors, Managers and Officers; Budget and Accounts Officers, Supervisors; Management and Programme Accountants, Local Government Chairmen, Treasurers, Accountants and Budget Officers, Budget Analysts, and Consultants.

# ANALYSIS OF STRUCTURAL TRAPS IN EXTENSIONAL SETTINGS

## OVERVIEW

This course is a further introduction to petroleum geology, dealing with rock formations and traps. The world's largest deposit of petroleum comes from extensional structures. Therefore, to properly harvest and utilize these deposits, a firm knowledge of Extensional structures and its analysis is needed. This course teaches participants the knowledge required to properly identify and work with extensional structures.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand and apply mechanical-stratigraphic principles governing the formation and evolution of extensional structures and apply restoration and balancing techniques to rock maps and facies mapping;
- learn how to predict structural geometry from sparse or inconsistent data using kinematic models; and
- recognize typical extensional and trans-tensional petroleum-trapping geometries within rock formation based on kinematic models.

## COURSE CONTENT

**Day 1** - Extensional structural styles and their plate tectonic habitats, Models for rifting and passive continental margin evolution, Transtensive structures, Detached and basement-involved styles, Map patterns.

**Day 2** - Faults, Folds and Related Structure

**Day 3** - Structural validation criteria, Selecting the best balancing and restoration technique, Flexural-slip restoration and predication, Vertical and oblique simple shear.

**Day 4** - Rigid-block restoration, Area-depth technique for section validation, depth to detachment, bed-length changes and fault prediction, Effect of detachment-zone thickness, Transition from horizontal to vertical displacement.

**Day 5** - Extensional drape folds, Tri-shear models of drape folds, Sequential restoration of growth structures, Fracturing in extensional structures.

## TARGET AUDIENCE

Geologists and Petroleum geologists, Geophysicists, and Engineers

# RESERVOIR MANAGEMENT

## OVERVIEW

This training course offers a comprehensive knowledge of techniques involved in reserve evaluation in order to estimate the quantity of hydrocarbon deposits present in the reservoir. The training imbibes the latest developments in reservoir management from core analysis, fluid classification to the production profile throughout the life of a reservoir.

The training course is designed to encourage delegate participation via group discussions of current issues bordering the course content and case studies designed to reinforce new knowledge and skills.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the different phase behavior of reservoirs;
- understand the characteristics of different fluids that can be found in the reservoir;
- comprehend sound core analysis data interpretation and its application;
- understand the analysis of properties peculiar to oil and gas reservoirs; and
- understand the plotting of the production profile from the decline curve.

## COURSE CONTENT

**Day 1** – Properties of Petroleum Fluids

**Day 2** – Fundamentals of Reservoir Properties & Performance

**Day 3** – Reserve Analysis for Oil and Gas Reservoirs

**Day 4** – Oil and Gas Recovery and Core Analysis

**Day 5** – Decline Curve Analysis

## TARGET AUDIENCE

Reservoir Engineers, Subsurface Geoscientists, and Geoscientists/Geologists.

## DEVELOPMENT GEOLOGY

### OVERVIEW

This course is designed to teach participants how to create and follow through on a field development plan that entails optimal recovery, despite the risk associated with the prospect. Importance is placed on rock, log and test data to distinguish reservoir and non-reservoir rock properties.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- learn how to delineate various types of logs such as Micro resistivity logs, Cement bond logs, Gamma ray logs, Spectral gamma ray logs, Density logging, Open hole caliper logs;
- identify field reserves and interpret log data to identify reservoir and non-reservoir rock;
- characterize reservoir rocks by productivity and construction of geologic models using data read from logs and seismic analysis; and
- create a development plan from reserves classification and depositional environment to optimize development, create a field development plan and use basic economics techniques appraise, judge and access the potential quality and returns on multiple development plans.

### COURSE CONTENT

- Day 1** – Characteristics that impact field development, Determining recoverable hydrocarbons, Reservoir fluid properties, Influence of capillarity reservoirs.
- Day 2** – Volumetric reserve estimation and calculation, Stratigraphic influence on production, Controls on reservoir rock, barriers, and hydrocarbon distribution, describing reservoir rock in carbonate and clastic rocks, Determining recoverable hydrocarbons.
- Day 3** – The impact of drive mechanism, Seismic applications, Development drilling: optimizing hydrocarbon recovery, Economic impact on field development and subdividing the reservoir into individual working units.
- Day 4** – Reservoir pore space configurations, building a static reservoir model using deterministic and stochastic techniques, Key factors affecting the development of fractured reservoirs.
- Day 5** – Impact on barriers on field development, Secondary and tertiary field development, Rejuvenating old marginal fields.

### TARGET AUDIENCE

Reservoir and Exploration/Subsurface Geologists; Geophysicists; Petrophysicists, Log Analysts & Petroleum Engineers.



## OPERATIONS GEOLOGY

### OVERVIEW

Operations Geology deals with the interplay of geology and engineering before the field is already active. Drillers should know why to drill within a certain section of the reservoir, the completion team should also know where to perforate the well. It also introduces participants to the dynamic workings and updates of the field development plan as more data becomes available from Cuttings, cores, logs, and well tests.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- plan and prepare for a drilling location and for geological services;
- identify drilling operations and geological drilling hazards;
- understand and apply logging services and well testing services; and
- evaluate drilling reports and the impact on the field development plan.

### COURSE CONTENT

**Day 1** - Petroleum geology and its systems, Operations geology: prospect to well planning, provision of geological services, Wellsite geology: geological sampling, sample analysis, and well stratigraphy, cutting, and core description.

**Day 2** - Structural geology: fractures, faults, borehole geology, Drilling Operations: bits, fluids, casing and cement, drilling problems and well control, directional drilling, geosteering, Logging operations: acquisition, tools, quick look interpretation, MWD/LWD, geosteering

**Day 3** - Well testing & fluids: reservoir properties, rock and fluid interaction, permeability, averaging, data gathering and interpretation, Impact on FDP: case histories.

**Day 4** - Tendering and contracting, Reporting: geological data, petrophysical data, pressure data.

Exercises: cores, cuttings, quick look, pressures, daily drilling report.

### TARGET AUDIENCE

Drilling Engineers, Project Engineers, Geologists, Well site and Subsurface Engineers

## CARBONATE RESERVOIRS

### OVERVIEW

This emphasizes the complexity of carbonate porosity and its modification and evolution will be discussed in a sea-level driven sequence stratigraphic framework. This course is important for geologists and engineers dealing with carbonate reservoirs for exploration purposes.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- recognize basic characteristics of carbonates that are important to reservoir development and Structural Styles in Petroleum Exploration;
- understand how sequence stratigraphy can be applied to carbonates and mixed carbonate-siliciclastic systems and the complexities of carbonate pore systems;
- recognize the nature of carbonate porosity modification during diagenesis and the role of sea-level and climate in porosity modification and gross reservoir heterogeneity; and
- develop viable exploration and exploitation strategies in carbonate terrains by working with subsurface datasets.

### COURSE CONTENT

- Day 1** - Basic nature of carbonates  
Carbonate facies models  
Basic concepts of sequence stratigraphy
- Day 2** - Relationship of stratigraphic patterns to changes in subsidence rates  
Sequence stratigraphic models including ramp, rimmed shelf, escarpment margin, isolated platform, and mixed carbonate-siliciclastic shelf  
Characteristics of carbonate pore systems
- Day 3** - Diagenesis, porosity evolution, and porosity distribution at the time of burial  
The fate of early-formed porosity during burial  
The potential value of dolomitization, including by hydrothermal processes
- Day 4** - The problem of H<sub>2</sub>S in carbonate reservoirs  
Natural fractures in carbonates
- Day 5** - Case studies and exercises from the Americas, Europe, and Asia  
Exploration and exploitation strategies in carbonate and mixed terrains

### TARGET AUDIENCE

Exploration and Development Geologists, Exploration and Development Managers, Geophysicists, and Engineers.

# STRUCTURAL STYLES IN PETROLEUM EXPLORATION

## OVERVIEW

This course provides an overview of all hydrocarbon-bearing structural assemblages and their associated trap types. The processes that produce the structures and control their styles are interpreted in terms of basic rock-mechanical principles. Classic outcrops, physical models, 2D and 3D seismic, and mature-field log-based interpretations from around the world provide analog examples for practical interpretation. Participants will learn the major structural trap geometries and the structural concepts for predicting the geometry where data are absent, misleading, or conflicting

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- recognize the different hydrocarbon-bearing structural styles in map and cross-section;
- distinguish the characteristics of each structural style on seismic reflection profiles;
- recognize the arrangement of structural styles and traps within structural families;
- apply mechanical-stratigraphic concepts to understand and predict trap geometry; and
- use restoration and balance technique to validate interpretations and show structural evolution.

## COURSE CONTENT

- Day 1** - Comparative structural geology  
Structural families and styles  
Mechanical principles governing fold and fault geometry  
Folding vs. faulting, Palinspastic restoration of cross sections
- Day 2** - Structural validation criteria, Regional arches and domes  
Compaction and substratal solution, Wrench faults: simple, convergent, and divergent
- Day 3** - Conjugate and domino-style strike-slip regimes, Fault-related folds, Duplexes  
Vertical and rotational block uplifts, Inversion: dip-slip to strike-slip
- Day 4** - Thin-skinned extension, Basement-involved extension, Domino-style extension, Diapirs
- Day 5** - Salt sheets, Roho and counter-regional pseudo-extensional fault systems, Plate-tectonic habitats of structural assemblages, Tectonic synthesis and exploration project

## TARGET AUDIENCE

Exploration Geologists, Geophysicists, Engineers, and Geoscience Managers.



ENGINEERING

# RESERVOIR MANAGEMENT AND MONITORING

## OVERVIEW

To effectively manage a producing field, there must be an inter-disciplinary co-operation between those directly involved in the production process and those who operate the field. This course teaches participants the rudiments and fundamentals of reservoir management and monitoring so as to optimize production and commercial profits from the well

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- apply the principles of sound reservoir management;
- use the interdisciplinary synergistic approach to efficient reservoir management; and
- include each reservoir management component and the importance of timing and cost/benefit analysis.

## CONTENT

- Day 1** - Definition of reservoir management: an integrated, interdisciplinary team effort  
Goal setting, planning, implementing, monitoring, and evaluating reservoir performance  
Field development and field operating plans to optimize profitability
- Day 2** - Efficient monitoring of reservoir performance  
Minimizing drilling of unnecessary wells  
Wellbore and surface systems  
Well testing and automated production systems
- Day 3** - Economic impact of operating plans  
Identifying and acquiring critical data, data acquisition, and analysis  
Maximizing economic recovery and minimizing capital investment, risk, and operating expenses
- Day 4** - Timing of field implementation of reservoir management plan  
Case studies and analysis  
Importance of reservoir characterization, drilling, and operating plans
- Day 5** - Primary recovery, pressure maintenance, and secondary and tertiary recovery  
Responsibilities for team members

## TARGET AUDIENCE

Reservoir, Production, and Operations Engineers, Geoscientists, Managers, Experienced Technicians, and Service Company Personnel

# FUNDAMENTALS OF FIELD DEVELOPMENT PLANNING

## OVERVIEW

A Field Development Plan forms a key input for designing associated surface facilities. The plan is a document that is an output of a sequence of decision and discipline-based tasks designed to optimize field production. This Field Development Planning course provides participants with an opportunity to learn the fundamental approach to working and writing a Field Development Plan.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- learn about the phases of a reservoir life cycle, the reservoir management process and concepts, team structure in integrated reservoir studies;
- learn about Static and Dynamic Reservoir Model as well as integrated field planning;
- learn how dynamic model helps predict performance by robust field development planning; and
- understand the importance of surface facilities in field development planning and also economic analysis and optimization of development scenarios.

## COURSE CONTENT

**Day 1** - Phases of a reservoir life cycle.

**Day 2** - Data integration and their interdependence. Integration and timing of subsurface and surface for decision making process.

**Day 3** - Various components of a Field Development Plan.

**Day 4** - Introduction to Opportunity Framing Workflow, road map, risk register and stake holder mapping.

**Day 5** - Enhancing Production of Assets in a Field Development Plan

## TARGET AUDIENCE

Engineers, Geoscientists, Operating Personnel, and Asset Management teams

# PVT PROPERTIES OF RESERVOIR FLUIDS

## OVERVIEW

This course will present the methods for obtaining values of reservoir fluid properties from laboratory data and correlations. The Chemical properties of hydrocarbons, conventional laboratory PVT (Pressure-Volume-Temperature) tests and quality control will be taught and participants will learn about phase diagrams, mixing rules, EOS, EOS tuning, and fluid properties while attending this course.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the basic fundamentals of PVT analysis, along with object of PVT analysis and the rudiments of hydrocarbon chemistry;
- understand phase behavior of single and multi-component systems, including miscibility concept and effect of pressure; and
- learn about correlations and discuss Equations of State (EoS), development of EoS models, comparisons of EoS results, evaluation of phase boundaries and flash equilibrium with EoS, K-value correlations and the tuning of EoS.

## COURSE CONTENT

**Day 1** - Fundamentals of PVT (Pressure-Volume-Temperature)

**Day 2** - PVT Fluid Properties, Reporting and Evaluating

**Day 3** - Development of Equation of State (EoS) Models

**Day 4** - Tuning and Data Requirements

**Day 5** - Oil Filed Applications

## TARGET AUDIENCE

Operations, Production, and Reservoir Engineers

## DRILLING OPTIMIZATION

### OVERVIEW

Drilling optimization is a course that teaches participants to get the most from drilling activities. Based on information gathered about the reservoir, drillers should know how to create a drilling plan to ensure safety to workers, environmental safety and sustainable production over the life of the field.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the drill string design process in context with other planning and operational considerations;
- clarify performance properties of drill string components and how to apply design margins;
- design cost-effective BHAs and match them to wellbore conditions;
- analyze common load cases for both near-vertical and high-angle situations: tension loads, torque loads, combined tension-torque loads, fatigue loads, buckling loads;
- understand the basis for industry software design tools, including torque and drag, casing wear, and hydraulics;
- explore directional drilling techniques; and
- optimize your drill string inspection program using the latest industry standards.

### COURSE CONTENT

**Day 1** - Introduction to Drilling Optimization

**Day 2** - Benchmarking with Key Performance Indicators

**Day 3** - Design to Execution

**Day 4** - Measurements and Technology Enablers

**Day 5** - Drilling Optimization Workshop

### TARGET AUDIENCE

Operations, Production, and Drilling Operators.



# INTRODUCTION TO DRILLING

## OVERVIEW

This course introduces participants to the basic rudiments in drilling engineering. It introduces the basics of drilling, testing the drill site, preparing the drill area, interpreting logs and core plugs to determine and create a drill plan, types of drill bits and parts of a drilling system and introduction to onshore and offshore drilling.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- learn about the roles of operators and the drilling contractor in drilling projects,
- understand types of drilling rigs, and the drilling process;
- carry out core sampling operations, types of drilling fluids, casing and cementing operations, pressures in the well from the formation and from the drilling fluids; and
- learn well workover, well intervention and well control techniques

## COURSE CONTENT

**Day 1** – Introduction to the Drilling Process: Components and Criteria

**Day 2** – Design considerations in well drilling and design

**Day 3** – Well Completions: Casing and Cementing

**Day 4** – Drilling Optimization: Directional Drilling

**Day 5** - Well Workovers, Well Interventions, and Well Control Procedures

## TARGET AUDIENCE

Operations, Production, Drilling, and Operators.

# DRILLING PROJECT & RISK MANAGEMENT

## OVERVIEW

Companies invest large sums of capital, sometimes accruing costs running into billions of dollars. These projects are all risky, but risk can be minimized with proper planning and information gathering from every other process before drilling the well. This course teaches participants the skills required to create a drilling plan and a sustainable drilling project, used the basic tenets and principles of project management.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand project and risk management principles and how to apply these principles during drilling operation management.
- experience a holistic, multi-disciplinary, and integrated management course that will involve operations, personnel, administration, finance, and legal functions;
- learn about project planning and design, contract models, drilling program and planning software ; and
- learn about tendering and contracting strategy, project finance and administration, supply chain management, and project closeouts, HSEQ management systems, risk management processes, levels of risk management and operational risk management and analysis.

## COURSE CONTENT

**Day 1** - Drilling Project and Risk Management

**Day 2** - Drilling Software and Programming

**Day 3** - Supply Chain Management and Reporting Systems

**Day 4** - Management

**Day 5** - Risk Management

## TARGET AUDIENCE

Operations, Production, Drilling, and Operators.



# HEALTH SAFETY & ENVIRONMENT (HSE)

## APPLIED HSE MANAGEMENT

### OVERVIEW

In five days, participants will learn how to develop and use an HSE management system to drive operational safety in their organization. This course is about understanding and applying common HSE management systems in oil, gas and petrochemical industries. It includes a rich blend of knowledge development sessions, individual and team exercises, problem-solving, and sector case studies. These come together to challenge participants in realistic scenarios.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- successfully apply the principal elements of an HSE management system aligned to the international standards ISO 14001 (environment) and OHSAS 18001 / ISO 45001 (occupational health and safety), and how to relate these to company management systems;
- explain responsibilities for HSE management and the characteristics of successful leadership and management styles;
- use key tools associated with HSE management including HazID, risk assessment, JHA, JSA, PTW, LOTO, and active (leading) and reactive (lagging) monitoring; and
- shape and initiate improvement in the safety culture of their own organizations.

### COURSE CONTENT

**Day 1** - Leadership and commitment, HSE policy and strategic objectives, Legislation and regulation

**Day 2** - Organization, responsibilities and resources, Professional training and behaviors, Risk assessment and hierarchy of control

**Day 3** - Planning and procedures, Contractor controls, Security

**Day 4** - Emergency preparedness and response, Performance management, Incident reporting and investigation

**Day 5** - Auditing, Management review and Improvement

### TARGET AUDIENCE

HSE Managers, Operations Supervisors, Engineers, Contract Managers, and Project Managers.

# EMERGENCY & CRISIS MANAGEMENT IN THE OFFSHORE OIL & GAS ENVIRONMENT

## OVERVIEW

The range of potential incidents and emergencies which could affect, disrupt, or stress production are increasing. Along this vein, these critical emergencies could result in significant losses, put increased demand on the organization, and often time have serious consequences for the company, associated stakeholders, and the reputation of all those involved in the response.

However, if managed correctly, not all incidents will be critical or could be classed as a crisis. This interactive Crisis Management and Emergency Response training course will expose participants to the important protocols and schematics needed to handle emergencies and respond accordingly to organizational crises.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the relationship between Incidents, Emergencies. and Crisis in the industry;
- develop methods on how to prevent escalation, design command, and control response to common and peculiar scenarios;
- learn how to enhance on-scene leadership capabilities and techniques;
- apply best practice in organizing Emergency Communications Centre (ECC), Emergency Response (ERT) and Crisis Management Teams (CMT); and
- analyze the importance of Human Factor, discussing the means to ensure the best psychological readiness, resource allocation, deployment, discipline and leadership.

## COURSE CONTENT

**Day 1** - Introduction, Perspectives on Crises, Consequences of Disaster: What are our risks? The Macondo Autopsy and Crisis Management Plans.

**Day 2** - Crisis Management Fundamentals and Risk: Recognition, Assessment, Prioritization and Prevention.

**Day 3** - Case Study: Crisis Prevention, Structural and Behavioral practices

**Day 4** - Where do we stand on Crisis & Business Continuity Readiness? : Audit/Assessment, Culture, Scenario Final Test, Structure, Training, Planning.

## TARGET AUDIENCE

Ministry or Government Regulators, Safety and Security Professionals, Operations personnel, Asset and Facility Professionals, Risk and Insurance Professionals, Emergency and Crisis Response Professionals

## OIL SPILL RESPONSE & CONTROL

### OVERVIEW

This course covers Oil Spill Response and Control Programs in the Oil & Gas Sector. It is an intense classroom-only course that teaches a system of pre-spill readiness, spill response drills; Incident Command System (ICS), and post-spill reaction planning, strategy, and tactics. This training is based on the global standard-setting U.S. FEMA Incident Command System (ICS), covering technical aspects and overviews of oil spill response equipment, the behavior of oil in the marine environment, and spill trajectory and tracking modeling.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the International Conventions and legal frameworks in place that can support an incident;
- understand the roles of Government Agencies and industry during an incident;
- understand effective implementation of contingency plans;
- comprehend the incident strategies and tactics that could be implemented throughout a response;
- learn the appreciation of the additional hazards faced by responders during an incident; and
- understand media expectations and effective communications whilst protecting and maintaining organizational integrity.

### COURSE CONTENT

**Day 1** - Effective emergency response contingency planning and implementation in a spill.

**Day 2** - Spill response options and resource requirements: Boundaries and roles of Government Agencies and the Industry.

**Day 3** - Safety-first culture in response: Understand PR and media expectations, effective communication with the media and general public, and International conventions and legal frameworks.

**Day 4** - Understanding oil spill response management.

### TARGET AUDIENCE

HSE Managers, Ministry or Government Regulators, Safety and Security Professionals, Operations personnel, Asset and Facility Professionals, Risk and Insurance Professionals, Emergency and Crisis Response Professionals

## CONTRACTORS SAFETY MANAGEMENT

### OVERVIEW

This interactive Contractor Safety Management training course will provide delegates with all the necessary skills to successfully appoint and manage contractors with confidence to ensure their health and safety performance will be of the highest quality.

Every organization is at risk when tasks are outsourced without validation. Therefore, it is essential to ensure that all necessary checks and balances are put in place.

This training course will develop Participant's capacity to critically assess contractors at all stages of a project to ensure maximum performance and minimal risk.

### LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand planning and selecting contractors – practical arrangements and methods;
- learn how to establishing project interface agreements, documentation and HSE Project Plan;
- learn how to manage contractors' compliance, with the HSE Project Plan, on day-to-day basis;
- understand monitoring – keeping track of contractor's performance; and
- understand review and learn – contractor management, deciding what needs to be improved.

### COURSE CONTENT

**Day 1** - Project Planning & Selecting Contractors.

**Day 2** - Client/Contractor Interface - HSE Project Plan.

**Day 3** - Managing Contractor Safety on Site.

**Day 4** - Monitoring Contractor Performance.

**Day 5**- Contractor Review and Lessons Learned for Improvements.

### TARGET AUDIENCE

HSE Managers, Ministry or Government Regulators, Safety and Security Professionals, Operations personnel, Asset and Facility Professionals, Risk and Insurance Professionals, Emergency and Crisis Response Professionals

# OFFSHORE SAFETY & RISK MANAGEMENT SYSTEMS

## OVERVIEW

Safety and Risk Management requires following appropriate legislative standards to be able to assess, monitor, and reduce the possibilities of risks and potential hazards, such as vessel hazards, working over water and diving operations in the offshore environment. Safety Management is applicable in all companies either by following an accredited Safety Management System or following a Hazard register with the appropriate Risk Assessments.

Additionally, the training course will cover confined space entry and safe shift handover, which are two areas that consistently cause incidents and loss.

## LEARNING OBJECTIVES

At the end of the workshop, participants will:

- understand the legal background to Offshore Safety;
- appreciate the concept of risk management;
- understand hazards of Vessels and Offshore operational hazards;
- gain knowledge about the elements of a typical Safety Management system;
- evaluate hazardous material; and
- understand the hazards of confined space entry.

## COURSE CONTENT

**Day 1** - Safety Legislation & Safety Management Systems.

**Day 2** - Risk Management & Risk Assessments.

**Day 3**- HAZOP, ATEX & Emergency Response.

**Day 4** - Confined Space Entry & Gas Testing.

**Day 5** - HAZMAT.

## TARGET AUDIENCE


HSE Managers, Ministry or Government Regulators, Safety and Security Professionals, Offshore Operations personnel, Asset and Facility Professionals, Risk and Insurance Professionals, Emergency and Crisis Response Professionals






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