

# ECONOMICS AND MANAGEMENT OF EXPLORATION AND PRODUCTION

## OBJECTIVES

- To improve the understanding of the economics of exploration and production.
- On completion of the course, the participants will:
- know the current and forecast economic trends;
  - understand the impact of new developments in E&P technology;
  - comprehend the different fiscal and contractual regimes;
  - have gained experience in E&P decision evaluation techniques in relation to current industry problems through case study work.

### ▲ Who should attend?

Engineering, technical and commercial staff who need to extend their understanding of the economic and business aspects of the upstream sector.

## COURSE CONTENT

### ECONOMIC ENVIRONMENT

0.25 day

Economic development of the upstream sector.  
Its current position in the petroleum industry.  
Various actors in exploration-production and their strategies. Oil markets and prices.  
Current exploration and production activities.  
Levels of investment.  
Examples of finding, development and production costs.

### FISCAL ENVIRONMENT

0.75 day

General principles of oil tax systems. Laws, concessions agreements, production sharing contracts, service contracts.  
Impact on various contractual and technical parameters.  
Sharing of the economic rent between the State and Oil Companies. Economic flexibility.  
Legal aspects of joint ventures. Main legal provisions in a Joint Venture Operating Agreement (JOA).  
Importance of voting percentages. Concept of sole risk and non-consent.  
Force majeure cases, role and responsibilities of the operator. Dispute resolution. Problems and procedures for arbitration.

### MANAGEMENT OF THE EXPLORATION AND PRODUCTION BUSINESS

2 days

Financing of oil and gas projects. Basic aspects of Accounting and Financial Analysis.  
Special mandatory reporting for oil companies.  
Accounting of exploration expenditures, full cost, successful efforts.  
Amortization and depreciation methods, special provisions (depletion allowance,...), residual costs.  
Funds from operations, cash flows, financial equilibrium, working capital.  
Financial statement, return on capital employed, return on equity, financial leverage.  
Cost Analysis and Budgeting.  
Exploration costs, finding costs, development costs, replacement costs, production costs.  
Capital budgeting, authorizations for expenditure, planning and scheduling, budgeting exploration activities.  
Principles and methodology of cost control.  
Budget content and breakdown, selection of a cost control method.  
Standard costs, fixed and flexible budgets, analysis of variations.  
Management of joint ventures, role and responsibility of the operating committee.  
Budgets, principles of joint venture accounting, accounting procedures, cash calls, joint-venture audit.

### ECONOMIC AND RISK EVALUATION

1 day

Methodology and economic evaluation criteria, Net Present Value, Internal Rate of Return, Pay Out Time.  
Introduction to risk analysis, Analysis of sensitivity to prices, capex and opex.  
Case study: oil field development project (concession agreement and production sharing contract).

### ▲ Duration

4 days

### ▲ In-house Course

### ▲ Conditions

To be agreed upon

### ▲ Course Coordinator

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