MAGNA SKILLS DEVELOPMENT INSTITUTE

Capacity Building • Professional Training • Organisational Development

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Course Profile Document

Oil and Gas Energy

Upstream Oil and Gas Development Lifecycle Costing

Prepared as a professional course profile for delegate review, sponsorship approval and organisational training planning.

COURSE CODE	DELIVERY	DURATION	PREPARED FOR
MSD2698	**Online / Face-to-Face**	**Flexible**	**Organisation Approval**

Register for this Course

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Course Overview

This engrossing four day course discusses how upstream oil and gas lifecycle costing ('cost forecasting') goes beyond cost estimation and cost engineering to provide a holistic, multi-disciplinary, full-life account of 'where the money goes' in this high-risk, high-reward, capital intensive industry.

The curriculum addresses the costing of long-life, capital-intensive upstream developments, both onshore and offshore, in the face of: uncertain and incomplete information; continually evolving technology needed to address production of ever more difficult resources (such as heavy oil, shale gas, and light tight oil); ever deeper, harsher and more remote environments; and political instability.

Costing of all phases and all aspects of the entire asset (the oil or gas field) is considered, from acquisition, study, and exploration, through to production operations and decommissioning, including aspects which are often neglected, such as: operator's internal costs and operating tariffs.

The course concludes with discussion of fascinating topics that impact reliable costing, such as: human aspects (biases and irrationality), dealing with uncertainty, and why cost forecasts are so often wrong ('train wrecks').

Delivery of the training includes interactive costing exercises, using data and methods discussed during the programme.

Course Outcomes

- Better collaborate within multidisciplinary teams on field development planning tasks leading to investment decisions
- Give a comprehensive overview of the nature and magnitude of exploration, development, production and decommissioning costs
- Explain how to express lifecycle costings in cash flow and economic models
- Describe the challenges of upstream lifecycle costing, and dealing with uncertain and incomplete information

Course Outline / Curriculum

Upstream Oil & Gas Lifecycle Costing

- Aspects of the upstream oil and gas exploration, development and production industry.
- The asset (oil or gas field) lifecycle from acquisition and exploration, through to production and decommissioning
- Relationship to cost estimation and cost engineering
- Approaches to costing
- Bottom-up vs. top-down approaches
- Analog, benchmarking, parametric and cost metrics approaches
- Provision for engineering growth, contingency, unallocated provision, operator's reserve
- Types of cost: exploration; capital (capex), operating (opex) and decommissioning (abex)

Upstream Oil and Gas Lifecycle Cost Components

- Description of the items (activities, services, wells, facilities) that add to lifecycle costs (so they mean more than just numbers in a spreadsheet)
- Illustrative costs for all components
- The parameters ('key-drivers') that most influence the cost of components
- Cost metrics and rules-of-thumb
- Building of a cost model

Field Development Planning

- Introduction of the time element
- Time value of money, discounted cash flow, basic petroleum economics
- Cost, production, revenue, cash-flow profiles
- Building of an economic model

The Wider Context

- Issues relevant to how costs are prepared, used and influenced
- Petroleum production licences and contracts
- Cost 'train wrecks' – when costs go out of control
- The wisdom (and cost) of front end loading (FEL)
- Current and future challenges to oil and gas production (and hence to costing)
- Human aspects (biases, irrationality, vested interest) that can skew costing
- Dealing with risk, uncertainty and incomplete information
- Decision making
- Regional and host-country factors, including productivity and local content issues

Target Audience

- Upstream oil and gas industry professionals, managers and discipline experts, who need to gain a deeper understanding of upstream lifecycle costing
- Persons involved in industry oversight, from regulators, government agencies, non-governmental organisations (NGOs), charities, special interest and campaigning groups that need to better understand the cost constraints under which oil companies operate
- Early career professionals wishing to advance their understanding of upstream oil and gas costing and economics issues

Key Course Benefits

Work-Ready Skills

Delegates leave with practical tools, templates and methods they can apply immediately at work.

Better Institutional Results

The programme supports stronger planning, reporting, compliance, accountability and service delivery.

Sponsor-Friendly

This document is designed to help supervisors, HR units and sponsors approve delegate participation quickly.

Professional Recognition

Delegates receive training documentation and a certificate of completion after successful participation.

Our Training Centres & Delivery Options

Magna Skills offers flexible delivery through face-to-face training centres across Africa and beyond, plus Online / E-Learning for delegates who prefer remote participation.

Southern Africa

Practical training destinations with strong travel access and delegate support.

- Pretoria, South Africa
- Vic Falls, Zimbabwe
- Livingstone, Zambia

East Africa

Popular regional centres for government, NGO and donor-funded project teams.

- Kigali, Rwanda
- Kampala, Uganda
- Nairobi,
- Zanzibar, Tanzania

West Africa & Islands

Strategic locations for regional networking and executive capacity building.

- Accra, Ghana
- Port Louis, Mauritius

International Executive Venue

Premium destination training for senior teams and international delegates.

- Dubai, United Arab Emirates

Online / E-Learning

Attend from anywhere through live online, blended or self-paced learning options.

- Online, E-Learning
- Remote Teams
- Flex

Organisation-Based Training

Magna Skills can also arrange dedicated in-house training for ministries, NGOs and companies.

- Onsite
- Custom Dates
- Group Training

Ready to Nominate Delegates?

Use the links below to register, review the live course page or contact Magna Skills for organisation-based training support.

Register / Apply Online | **View Full Course Page**

About Magna Skills

Magna Skills Development Institute provides practical capacity building programmes for government departments, NGOs, public institutions, donor-funded projects and private sector professionals across Africa. Our training approach combines expert facilitation, real workplace case studies, practical tools, post-training support and professional documentation that helps organisations strengthen staff performance and service delivery.

Government Training | NGO Capacity Building | Corporate Workshops | Online Learning | Face-to-Face Training | Certifica

Approval & Authorisation Form

This section may be completed by the organisation, department, HR office, finance office or sponsor approving delegate participation. It can be attached to an internal memo, procurement request or training approval submission.

Organisation / Department	
Delegate Name(s)	
Approved Course	Upstream Oil and Gas Development Lifecycle Costing
Preferred Delivery Mode	☐ Online ☐ Face-to-Face ☐ Organisation-Based Training
Preferred Training Venue / Date	
Estimated Number of Delegates	
Budget / Vote Number	
Contact Person	
Email / Mobile	

Authorised Name _____ Signature / Stamp _____ Date _____