

COURSE OVERVIEW FM0634
Financial Modelling in the Oil & Gas Industry

Course Title

Financial Modelling in the Oil & Gas Industry

Course Date/Venue

August 16-20, 2026/Paris Meeting Room, Holiday Inn Corniche, Al Khobar, KSA

Course Reference

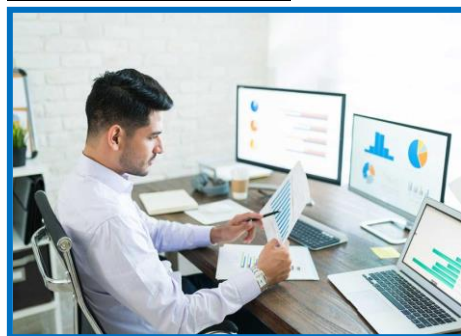
FM0634

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using the “MS Excel” application.

This course is designed to provide participants with a detailed and up-to-date overview of Financial Modelling in the Oil and Gas Industry. It covers the oil and gas value chain, financial drivers and principles of financial modelling best practices; the oil and gas project life cycle, financial implications and revenue modelling for oil and gas projects; the cost modelling fundamentals and discounted cash flow (DCF) analysis; structuring a robust oil and gas financial model; the production and reserves modelling, oil & gas, LNG pricing models and CAPEX modelling in oil and gas projects; and the OPEX, operating cost forecasting and decommissioning and abandonment cost modelling.



During this interactive course, participants will learn the oil and gas fiscal regimes, royalty and cost recovery modelling and profit sharing and government take; the corporate tax and supplementary taxes, financing structures in oil & gas projects and modelling joint ventures and partner interests; the investment appraisal metrics, sensitivity analysis in oil and gas models and scenario analysis and stress testing; the risk analysis and uncertainty modelling, economic limits and field life assessment including portfolio and asset comparison; the integrated asset and corporate financial models, energy transition and low-carbon project modelling; and the mergers, acquisitions and asset valuation, financial modelling for LNG and gas projects as well as model review, validation and governance.



Course Objectives/Outcomes & Benefits for the Participants

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on financial modelling in the oil and gas industry
- Discuss the oil and gas value chain and financial drivers and principles of financial modelling best practices
- Describe oil and gas project life cycle and financial implications and revenue modelling for oil and gas projects
- Illustrate cost modelling fundamentals and discounted cash flow (DCF) analysis and structuring a robust oil and gas financial model
- Apply production and reserves modelling, oil, gas, and LNG pricing models and CAPEX modelling in oil and gas projects
- Carryout OPEX and operating cost forecasting and decommissioning and abandonment cost modelling
- Explain oil and gas fiscal regimes, royalty and cost recovery modelling and profit sharing and government take
- Recognize corporate tax and supplementary taxes, financing structures in oil & gas projects and modelling joint ventures and partner interests
- Apply investment appraisal metrics, sensitivity analysis in oil and gas models and scenario analysis and stress testing
- Carryout risk analysis and uncertainty modelling, economic limits and field life assessment including portfolio and asset comparison
- Illustrate integrated asset and corporate financial models and energy transition and low-carbon project modelling
- Apply mergers, acquisitions, and asset valuation, financial modelling for LNG and gas projects as well as model review, validation and governance

Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of financial modelling in the oil and gas industry for government officials and regulators in energy ministries, M&A and asset valuation professionals, corporate finance, treasury and investment teams, project finance and infrastructure finance professionals, commercial, business development and strategy managers, joint venture and asset management teams, planning and budgeting professionals, financial professionals and financial analysts in oil and gas companies, petroleum economists and energy analysts, upstream, midstream and LNG project managers, consultants advising on energy and infrastructure projects and banking and private equity professionals focused on energy investments.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours

Certificate Accreditations

Haward's certificates are accredited by the following international accreditation organizations:

-  British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

-  The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Fee

US\$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.



Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Osama Harairi, MBA, BA, DBA (on-going), CPA, is a **Certified Public Accountant** and an **International Expert** in **Financial Management** with over **20 years** of practical experience in the areas of **Accounting Principles**, Accounting for Asset Retirement Obligations (**AROs**), **Financial Data Analysis Concepts & Process**, **Financial & Accounting Management**, **Financial Analysis & Planning**, **Finance & Auditing Management**, **Financial Markets Regulations**, **Financial Accounting**, International Financial Reporting Standards (**IFRS**), **Financial Reporting**, **Financial Models & Systems**, **Financial Indicators**, Financial Leverage, **Financial Modelling & Forecasting**, **Financial Analysis Techniques**, **Financial Planning Techniques**, **Cost Optimization**, Effective **Budgeting & Cost Control**, Planning & Forecasting **Cost**, **Economic Cost Analysis**, Evaluating **Cost & Revenue**, **Budgeting & Cost Control**, **Revenues & Profit Margins**, **Investment & Strategic Planning**, **Cash Flow**, **Corporate Finance**, **Investment & Asset Management**, **Operation Management**, **Debt Restructuring**, **Budgeting & Risk Management**, **Master Planning**, **Annual Costs & Expenses Reduction**, **Sales & Profit Average Increase**, **Budgeting & Cost Control**, **Budget Forecasting**, **Risk Analysis & Management**, **Business Process Analysis & Modelling**, **Strategic Management**, **Foreign Exchange**, **Trading**, **Market & Financial Analysis**, **Business Planning**, **Total Productivity Measurement & Improvement**, **Project Implementation**, **Cost Control & Resource Allocation Management**, **Productivity Enhancement**, **International Treasury Management**, **Procurement & Stock Management**, **Return on Capital**, **Discounted Cash Flows**, **Equity Profitability Analysis**, **Credit Analysis**, **Vendor Invoice Processing & Management**, **Microsoft Dynamics** and **ERP System**.

During his career life, Mr. Osama had occupied several important positions such as being the **Group CEO**, **Chief Executive Officer**, **Chief Financial Officer**, **Deputy General Manager**, **Acting General Manager**, **Accounting Department Head**, **Financial Manager**, **Accounting Manager**, **Senior Accountant**, **Accountant**, **Cashier Supervisor**, **Financial Consultant**, **Financial Trainer/Lecturer**, **Group Finance Consultant**, **External Auditor**, **Tax Calculation Expert** and **Cashier** of HS Group, Almas/Murad Group, Canadian Aluminum Industries, Gulf Food Co. Ltd., Silver Establishment, Musallam Establishment, Zahawani, Al-Naji, Basamat Center, Al Jazira, Al Ramiz International Group, Subhi Abu Gallous Co. and Rum Alladin Engineering Industries Co.

Mr. Osama has a **Bachelor's degree** in **Accounting**, holds **MBA** and currently enrolled for **Professional Doctorate** of **Business Administration (DBA)**. Further, he is also a **Certified Trainer**, a **Certified Public Accountant (CPA)**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)**, a **Board Member** and has wide range of published reports and journal articles in banking consulting and economic publications. He has further delivered numerous trainings, courses, seminars, conferences and workshops globally.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: Sunday, 16th of August 2026

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Overview of the Oil & Gas Value Chain & Financial Drivers <i>Upstream, Midstream, Downstream Business Models • Revenue Drivers Across Exploration, Production, Refining, and Marketing • Cost Structures: CAPEX, OPEX, Abandonment Costs • Impact of Reserves, Production Profiles, and Decline Curves</i>
0930 – 0945	<i>Break</i>
0945 – 1030	Principles of Financial Modelling Best Practices <i>Purpose and Structure of Financial Models • Transparency, Flexibility, and Auditability Principles • Assumptions Management and Documentation • Common Modelling Errors and How to Avoid Them</i>
1030 – 1130	Oil & Gas Project Life Cycle & Financial Implications <i>Exploration, Appraisal, Development, Production, Decommissioning • Timing of Cash Flows Across Project Phases • Risk Profiles at Different Stages • Financial Decision Gates (FID, Sanctioning, Divestment)</i>
1130 – 1215	Revenue Modelling for Oil & Gas Projects <i>Oil, Gas, and LNG Pricing Mechanisms • Production Forecasts and Lifting Schedules • Price Differentials, Transportation, and Quality Adjustments • Sales Contracts and Off-Take Agreements</i>

1215 – 1230	Break
1230 – 1330	Cost Modelling Fundamentals Capital Cost Estimation and Phasing • Operating Cost Categorization and Escalation • Fixed versus Variable Costs • Cost Benchmarking and Sensitivity
1330 – 1420	Basics of Discounted Cash Flow (DCF) Analysis Time Value of Money in Energy Projects • Cash Flow Construction Logic • Discount Rates and Risk Considerations • Project versus Equity Cash Flows
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day One

Day 2: Monday, 17th of August 2026

0730 – 0830	Structuring a Robust Oil & Gas Financial Model Model Architecture and Flow Logic • Inputs, Calculations, and Outputs Separation • Scenario and Sensitivity Design • Model Scalability for Portfolios
0830 – 0930	Production & Reserves Modelling Reserves Classification (Proved, Probable, Possible) • Production Ramp-Up and Decline Modelling • Plateau Production Assumptions • Impact of Recovery Factors
0930 – 0945	Break
0945 – 1100	Oil, Gas & LNG Pricing Models Fixed versus Floating Price Structures • Brent-Linked and Gas Indexation Formulas • Long-Term Price Forecasting Assumptions • Price Sensitivity Modelling
1100 – 1215	CAPEX Modelling in Oil & Gas Projects Development CAPEX Breakdown (Facilities, Drilling, Pipelines) • Timing and Phasing of Investments • Sustaining versus Growth CAPEX • Cost Overrun Risk Allowances
1215 – 1230	Break
1230 – 1330	OPEX & Operating Cost Forecasting Field Operating Expenses • Logistics, Utilities, and Manpower Costs • Maintenance and Turnaround Costs • Inflation and Escalation Treatment
1330 – 1420	Decommissioning & Abandonment Cost Modelling Abandonment Obligations and Timing • Cost Estimation Methodologies • Discounting Abandonment Liabilities • Impact on Project Economics
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Two

Day 3: Tuesday, 18th of August 2026

0730 – 0830	Oil & Gas Fiscal Regimes Overview Concession versus Production Sharing Contracts (PSC) • Service Contracts and Hybrid Models • Government Take and Contractor Share • Comparative Fiscal Analysis
0830 – 0930	Royalty & Cost Recovery Modelling Royalty Calculation Methods • Cost Recovery Ceilings and Limits • Cost Oil versus Profit Oil Concepts • Unrecovered Cost Carry-Forward
0930 – 0945	Break

0945 – 1100	Profit Sharing & Government Take Profit Oil/Gas Split Mechanisms • Sliding Scales and R-Factor Models • State Participation Impacts • Net Cash Flow Allocation
1100 – 1215	Corporate Tax & Supplementary Taxes Income Tax Modelling • Special Petroleum Taxes • Loss Carry-Forward and Tax Shields • Deferred Tax Concepts
1215 – 1230	Break
1230 – 1330	Financing Structures in Oil & Gas Projects Equity versus Debt Financing • Project Finance Structures • Interest, Repayment, and Covenants • Impact on Cash Flows and Returns
1330 – 1420	Modelling Joint Ventures & Partner Interests Working Interest Calculations • Carried Interests and Farm-Ins • Cash Call Mechanisms • Partner Cash Flow Allocation
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

Day 4: Wednesday, 19th of August 2026

0730 – 0830	Investment Appraisal Metrics Net Present Value (NPV) • Internal Rate of Return (IRR) • Payback Period • Profitability Index
0830 – 0930	Sensitivity Analysis in Oil & Gas Models Key Value Drivers Identification • Price, CAPEX, OPEX Sensitivities • Tornado Charts Interpretation • Break-Even Analysis
0930 – 0945	Break
0945 – 1100	Scenario Analysis & Stress Testing Base, Upside, and Downside Cases • Low Price and High Cost Scenarios • Regulatory and Fiscal Changes • Market Volatility Impacts
1100 – 1215	Risk Analysis & Uncertainty Modelling Technical, Commercial, and Fiscal Risks • Probability-Based Assumptions • Introduction to Probabilistic Modelling • Decision-Making Under Uncertainty
1215 – 1230	Break
1230 – 1330	Economic Limits & Field Life Assessment Operating Break-Even Price • Economic Cut-Off Determination • Field Abandonment Timing • Impact on Reserves Booking
1330 – 1420	Portfolio & Asset Comparison Ranking Projects Using Economic Metrics • Capital Allocation Decisions • Portfolio Diversification Benefits • Strategic Fit Analysis
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

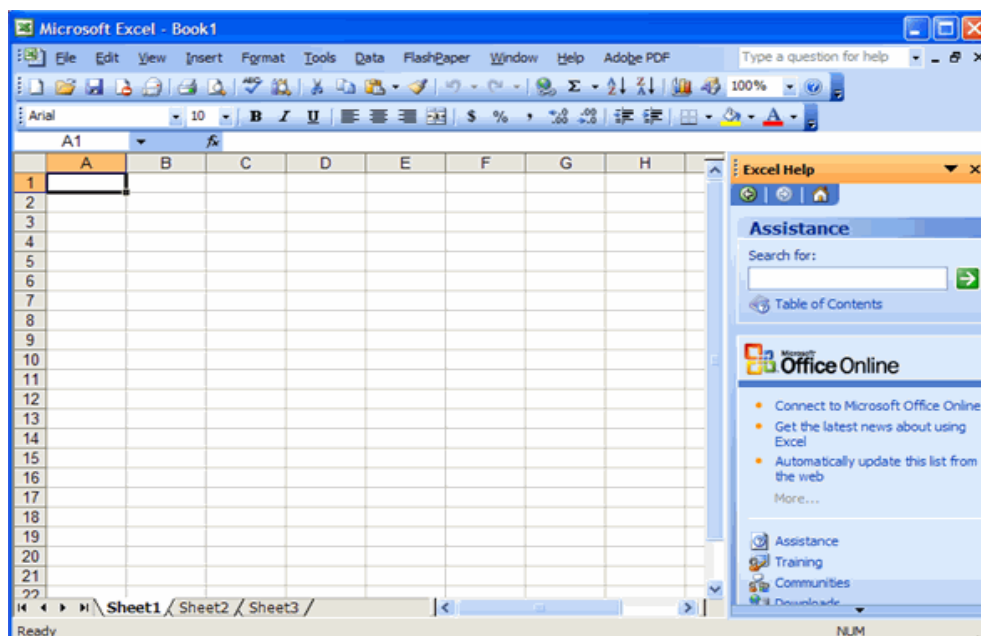
Day 5: Thursday, 20th of August 2026

0730 – 0830	Integrated Asset & Corporate Financial Models Asset-Level versus Corporate-Level Modelling • Aggregating Multiple Projects • Capital Allocation Optimization • Long-Term Strategic Planning
0830 – 0930	Energy Transition & Low-Carbon Project Modelling Financial Modelling of Renewables and Gas • Carbon Pricing and Emissions Costs • Energy Transition Investment Metrics • Comparing Traditional versus Low-Carbon Assets

0930 – 0945	Break
0945 – 1100	Mergers, Acquisitions & Asset Valuation Asset Valuation Methodologies • Farm-In / Farm-Out Modelling • Divestment and Acquisition Economics • Synergies and Integration Impacts
1100 – 1215	Financial Modelling for LNG & Gas Projects LNG Cost Chain Economics • Liquefaction, Shipping, and Regasification Costs • Long-Term Contract Pricing Models • Gas Market Volatility Impacts
1215 – 1230	Break
1230 – 1315	Model Review, Validation & Governance Model Validation Techniques • Audit and Review Checklists • Assumptions Governance • Version Control and Documentation
1315 – 1345	Practical Case Study & Model Walkthrough End-to-End Oil & Gas Project Model • Interpreting Results for Management Decisions • Communicating Financial Insights • Lessons Learned and Best Practices
1345 – 1400	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using “MS-Excel” application.



MS-Excel

Course Coordinator

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