

# COURSE OVERVIEW TM0056 Advanced Oil & Gas Project Economics, Risk & Decision Analysis

#### **Course Title**

Advanced Oil & Gas Project Economics, Risk & Decision Analysis

# Course Reference

TM0056

#### **Course Duration/Credits**

Five Days/3.0 CEUs/30 PDHs

# Course Date/Venue

Session(s)	Date	Venue
1	September 14-18, 2025	Tamra Meeting Room, Al Bandar Rotana Creek, Dubai, UAE
2	November 03-07, 2025	Hampstead Meeting Room, London Marriott Hotel Regents Park, London, UK
3	January 12-16, 2026	TBA Meeting Room, JW Marriott Hotel Madrid, Madrid, Spain
4	March 16-20, 2026	TBA Meeting Room, Grand Hyatt Athens, Athens, Greece

#### **Course Description**



This practical and highly-interactive course includes reallife case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.



This course is designed to provide participants with a detailed and up-to-date overview of Advanced Oil & Gas Project Economics, Risk & Decision Analysis. It covers the development economics, uncertainty in investments, risks and uncertainties; setting-up spreadsheet calculations using Excel and handling uncertainty in petroleum projects; the different economic terms used in the oil and gas industry; the expected value concept and its impact on decision tree analysis; the economic evaluation of oil and gas projects; quantifying project costs and benefits; assessing and quantifying risks in oil and gas projects; the risk mitigation and contingency planning; and managing project risk throughout the project lifecycle.



During this interactive course, participants will learn the decision analysis techniques; the capital budgeting, project cash flows and capital expenditures; the project financing process and the types of project financing available for oil and gas projects; the importance of financial risk management in project financing; the strategies for structuring and negotiating project financing; the oil and gas investment opportunities, portfolio management and project portfolios; evaluating the performance of oil and gas projects; and improving project, performance, effectiveness, continuous improvement and optimization of oil and gas projects.























#### **Course Objectives**

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

- Apply and gain an advanced knowledge on oil and gas project economics, risk and decision analysis
- Recognize development economics, uncertainty in investments, risks and uncertainties
- Set-up spreadsheet calculations using Excel and handle uncertainty in petroleum projects
- Discuss the different economic terms used in the oil and gas industry including the expected value concept and its impact on decision tree analysis
- Carryout economic evaluation of oil and gas projects as well as identify and quantify project costs and benefits
- Identify, assess and quantify risks in oil and gas projects, apply risk mitigation and contingency planning and manage project risk throughout the project lifecycle
- Carryout decision analysis techniques and incorporate these techniques into oil and gas project economics and risk management
- Apply capital budgeting, estimate project cash flows and capital expenditures and evaluate and select capital projects
- Illustrate project financing process and identify the types of project financing available for oil and gas projects
- Discuss the importance of financial risk management in project financing and strategies for structuring and negotiating project financing
- Analyze oil and gas investment opportunities, apply portfolio management, analyze and manage project portfolios and optimize project portfolios
- Evaluate the performance of oil and gas projects, improve project performance and effectiveness and apply continuous improvement and optimization of oil and gas projects

#### 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

The course provides an overview of all significant aspects and considerations of advanced oil and gas project economics, risk and decision analysis for oil and gas project managers, energy economists, financial analysts and investment managers, energy sector consultants, petroleum engineers and geoscientists and planning team.













#### Course Certificate(s)

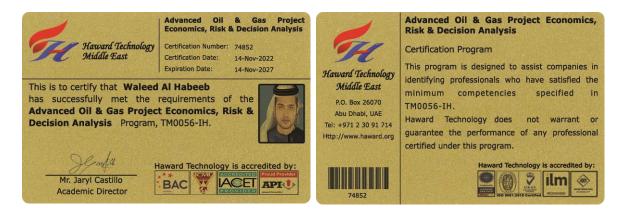
(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Certificates are valid for 5 years.

#### Recertification is FOC for a Lifetime.

#### Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-

















(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.















#### **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.

#### **Accommodation**

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













#### 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. Douglas Robinson, MBA, BSc (Honors), Dip, is currently the President of DSR Consulting and the Professor of Business Studies Unit (BSU) at Durban Institute of Technology (DIT), where he is lecturing at MBA level in Quality Management, Quality Control Systems and Standards, Legal Compliance and Corporate Governance Responsibilities, Corporate Valuation & Capital Restructuring, Managing Production Operations, Strategic Planning, Human Resources Management (HRM), Leadership

& Change Management, Presentation Skills, Negotiation Skills, Interpersonal Skills, Communication Skills, Adaptability & Flexibility, Learning & Self Development, Industrial Relationships, Driving Performance, Performance Measurement, Performance Goal Implementation, Time Management Techniques, Organizing Daily Activities, Handling Difficulties & Pressure, Productivity & Feedback Management, Problem Solving & Decision Making, ISO 9001 Lead Auditor, Commercial Negotiation & Legal Aspects, Logistics & Supply Chain Management, Quality Management, Project Financial Planning, Financial Management, Materials Inventory Management, Budgeting & Cost Control, Project Accounting, Project Management, Contract Management, Operations Management, Procurement Management, Entrepreneurship and International Business.

Mr. Robinson has over **40 years** of international experience in **Contract** Management, **Quality** Management, **ISO Standards**, Logistics & Supply Chain Management, Procurement, Purchasing, Outsourcing Strategies, Project Management, Business Systems, Operations Management and Business Re-Organization. Further, he is a **Registered Assessor** of **Quality** Management, Logistics, Supply Chain Management, Procurement Strategies, Purchasing and Outsourcing.

As a leader in the **Quality**, Procurement and Logistics fields, Mr. Robinson facilitated inhouse skills development programmes in a lot of companies worldwide and has **extensive consulting experience** in both the public and private sectors. His experience includes implementing SAP system in Procurement, financial, sales, distribution, materials management and costing.

During his long career life, Mr. Robinson worked for many International companies such as Tiger Brands, Nestle's, Mondi Manufacturing, Mondi Forests, Masonite Africa Ltd., Frame etc. He worked as General Manager, Quality Manager, Procurement Manager, Logistics Manager, Logistics Superintendent, Project Manager, Purchasing Supervisor, SAP Facilitator, etc.

Due to his thorough and long experience and knowledge, Mr. Robinson is **recognized internationally** as an **Expert** in Logistics & Supply Chain Management, Procurement, Purchasing, Outsourcing, Strategic planning, business wellness analysis, **Contract** management, **Project** Management, feasibility studies, financial analysis, cash-flow forecasting, Capital investment analysis, risk analysis, Business process analysis, and **Quality Management Systems**.

Mr. Robinson has a Master degree in Business Administration (MBA) from the University of Durban-Westville, a Bachelor degree with Honors in Business Management and Administration and Diplomas in Medical Technology, Marketing Management, Business Management and Project Management from the University of Rhodesia and from the Damelin Management School respectively. Further, he is a Certified Instructor/Trainer, a Certified Trainer/Assessor by the Institute of Leadership & Management (ILM), an active member of international professional affiliations and delivered innumerable trainings, courses, workshops and seminars globally.













#### **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.

#### **Course Fee**

Dubai	<b>US\$ 5,500</b> per Delegate + <b>VAT</b> . This rate includes H-STK <sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
London	<b>US\$ 8,800</b> per Delegate + <b>VAT</b> . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Spain	<b>US\$ 8,800</b> per Delegate + <b>VAT</b> . This rate includes H-STK <sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Athens	<b>US\$ 8,800</b> per Delegate + <b>VAT</b> . This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

#### **Course Program**

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

## Day 1

0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
	Introduction to Oil & Gas Project Economics
	Definition of Oil & Gas Project Economics, Risk & Decision Analysis • The
0830 - 0930	Importance of Project Economics, Risk & Decision Analysis in the Oil & Gas
0030 - 0930	Industry • Overview of the Project Economics, Risk & Decision Analysis Process &
	Requirements • Advanced Techniques in Decision Analysis, Risk Assessment &
	Economical Studies of Petroleum Projects
0930 - 0945	Break
	Economic Evaluation of Oil & Gas Projects
0045 1100	The Economic Evaluation Process • Different Economic Terms used in the Oil &
0945- 1100	Gas Industry • Types of Economic Models & their Application to Oil & Gas
	Projects
1100 - 1230	Economic Evaluation of Oil & Gas Projects (cont'd)
	Identifying & Quantifying Project Costs & Benefits • Importance of Time Value of
	Money & Discounting in Economic Evaluation













1230 – 1245	Break
1245 – 1420	Economic Evaluation of Oil & Gas Projects (cont'd)  Development Economics, Uncertainty in Investment, Risk & Uncertainties,  Setting-up Spreadsheets Calculations using Excel, Practical use of the Risks Addon: Oil Field Development Mod
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2

Day Z	
_	Risk Management in Oil & Gas Projects
0730 - 0930	Risk Management Process • Techniques for Identifying, Assessing & Quantifying
	Risks in Oil & Gas Projects
0930 - 0945	Break
	Risk Management in Oil & Gas Projects (cont'd)
0945 - 1100	Importance of Risk Mitigation & Contingency Planning • Strategies for Managing
	Project Risk Throughout the Project Lifecycle
	Decision Analysis Techniques for Oil & Gas Projects
1100 1220	Decision Analysis Techniques • Importance of Decision-Making under
1100 - 1230	Uncertainly • How to Handle Uncertainty in Petroleum Projects • The Expected
	Value Concept & Learn Its Impact on Decision Tree Analysis
1230 – 1245	Break
	Decision Analysis Techniques for Oil & Gas Projects (cont'd)
1245 - 1420	Techniques for Decision Tree Analysis, Monte Carlo Simulation & Real Options
	Analysis • Strategies for Incorporating Decision Analysis Techniques into Oil &
	Gas Project Economics & Risk Management
1420 - 1430	Recap
1430	Lunch & End of Day Two
1100 - 1230 1230 - 1245 1245 - 1420 1420 - 1430	Importance of Risk Mitigation & Contingency Planning • Strategies for Mana, Project Risk Throughout the Project Lifecycle  Decision Analysis Techniques for Oil & Gas Projects  Decision Analysis Techniques • Importance of Decision-Making us Uncertainly • How to Handle Uncertainty in Petroleum Projects • The Expensive Value Concept & Learn Its Impact on Decision Tree Analysis  Break  Decision Analysis Techniques for Oil & Gas Projects (cont'd)  Techniques for Decision Tree Analysis, Monte Carlo Simulation & Real Opten Analysis • Strategies for Incorporating Decision Analysis Techniques into O Gas Project Economics & Risk Management  Recap

Day 3

Day 3	
	Capital Budgeting in Oil & Gas Projects
0730 - 0930	Capital Budgeting Process • Importance of Capital Budgeting in Oil & Gas
	Projects
0930 - 0945	Break
	Capital Budgeting in Oil & Gas Projects (Cont'd)
0945- 1100	Techniques for Estimating Project Cash Flows & Capital Expenditures • Strategies
	for Evaluating & Selecting Capital Projects
	Project Financing in Oil & Gas Projects
1100 - 1230	Project Financing Process • Types of Project Financing Available for Oil & Gas
	Projects
1230 – 1245	Break
	Project Financing in Oil & Gas Projects (cont'd)
1245 - 1420	Importance of Financial Risk Management in Project Financing • Strategies for
	Structuring & Negotiating Project Financing
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 - 0930	Investment Analysis in Oil & Gas Projects Investment Analysis Process • Techniques for Analyzing Oil & Gas Investment Opportunities
0930 - 0945	Break

















0945- 1100	Investment Analysis in Oil & Gas Projects (cont'd) Importance of Market & Competitive Analysis in Investment Analysis • Strategies for Evaluating & Selecting Oil & Gas Investment Opportunities
1100 - 1230	Portfolio Management in Oil & Gas Projects  Portfolio Management Process • Importance of Portfolio Management in Oil & Gas  Projects
1230 – 1245	Break
1245 – 1420	Portfolio Management in Oil & Gas Projects (cont'd)  Techniques for Analyzing & Managing Project Portfolios • Strategies for Optimizing Project Portfolios
1420 - 1430	Recap
1430	Lunch & End of Day Four

### Day 5

- 3 -	
0730 - 0930	Performance Evaluation & Improvement in Oil & Gas Projects  Tackwing of Oil & Cas Projects
	Techniques for Evaluating the Performance of Oil & Gas Projects
0930 - 0945	Break
0945 - 1100	Performance Evaluation & Improvement in Oil & Gas Projects (cont'd)
	<i>Importance of Performance Metrics &amp; Key Performance Indicators (KPIs)</i>
1100 – 1230	Performance Evaluation & Improvement in Oil & Gas Projects (cont'd)
1100 - 1230	Strategies for Improving Project Performance & Effectiveness
1230 - 1245	Break
1245 - 1300	Performance Evaluation & Improvement in Oil & Gas Projects (cont'd)
1245 - 1500	Importance of Continuous Improvement & Optimization of Oil & Gas Projects
1300 - 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course











# **Practical Sessions**

This practical and highly-interactive course includes real-life case studies and exercises:-



# **Course Coordinator**

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