COURSE OVERVIEW DE0642-4D
Commercial Acumen of the Oil and Gas Value Chain
A Challenging Simulation Programme

Course Title
Commercial Acumen of the Oil and Gas Value Chain: *A Challenging Simulation Programme*

Course Date/Venue
November 04-07, 2024/Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA

Course Reference
DE0642-4D

Course Duration/Credits
Four days/2.4 CEUs/24 PDHs

Course Description

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

Since more than a century, the oil industry is leading the energy sector of the world. The world economy depends on the safe supply of oil and gas from producing countries to the consuming ones. Understanding the global oil demand and the factors affecting the crude oil market is vital for petroleum professionals. This course will explain the various factors and forces that affect the crude oil and natural gas markets and the relationship between oil/gas producers and consumers.

This course is designed to provide participants with a commercial acumen of the oil and gas value chain. Participants will understand the nature of the oil and gas industry and how they will contribute to the financial success of their companies. The course will introduce delegates to the oil and gas industry including supply and demand, how oil companies are organized and financed and what it takes to be financially successful.

The course will cover the dynamics and value chain of the global oil and gas industry; the exploration methods and the host country agreements; the drilling and well completion; the reservoir characterization and reserve estimation; the crude oil transportation and pipelines for tankers, pipelines and LNG; the natural gas markets and pricing; the field development and well performance; the petrochemicals and performance; the measuring financial performance; the petroleum products distribution and marketing; the gas distribution system and marketing; the global oil demand, crude oil market and global oil reserves; and the governmental legislation and contractual agreements.

At the end of the course, participants will be able to analyze terms of the contractual agreements, use the financial model to evaluate project value drivers and identify governmental legislation and how it pertains to oil contract; calculate revenue and profitability in oil projects and illustrate project financial models, project risk analysis and profit-risk curve; evaluate oil projects, study the economic feasibility behind each project and identify the various feasibility analysis techniques and capital operational costs; employ oil and gas exploration; evaluate and delineate drilling; carryout field development and production, field layout, production techniques, production control and surface production operations; illustrate oil refinery and processing, oil transportation-methods and flowmetering and custody transfer; identify upstream, midstream, downstream and the responsibilities of the different companies; and recognize the use of technology in the industrial security, the various security threats and security risk analysis.

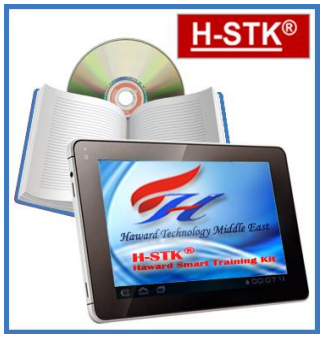
Course Objectives

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

- Apply and gain an in-depth knowledge on commercial acumen of the oil and gas value chain
- Discuss global oil demand, factors that affect demand, major global oil producers and OPEC
- Determine crude oil market covering crude oil prices, driving forces behind global markets, supply versus demand and market share phenomena
- Explain the global oil reserves, types of reserves, distribution of reserves by continent and country and reserves effects on oil prices
- Describe the balance of supply, global demand of oil, demand growth rate, factors affecting the demand growth and the renewable energy
- Review the governmental legislation and contractual agreements
- Analyze terms of the contractual agreements, use the financial model to evaluate project value drivers and identify governmental legislation and how it pertains to oil contract
- Calculate revenue and profitability in oil projects and illustrate project financial models, project risk analysis and profit-risk curve
- Evaluate oil projects, study the economic feasibility behind each project and identify the various feasibility analysis techniques and capital operational costs

- Employ oil and gas exploration that includes reservoir evaluation, project strategy and drilling techniques
- Evaluate and delineate drilling through analyzing the extraction of oil and gas, crude oil types and specifications, sulphur contents, sour natural gas and natural gas sweetening
- Carryout field development and production, field layout, production techniques, production control and surface production operations
- Illustrate oil refinery and processing, oil transportation-methods and flowmetering and custody transfer
- Describe upstream, midstream, downstream and the responsibilities of the different companies
- Recognize the use of technology in the industrial security, the various security threats and security risk analysis

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 commercial acumen of the oil and gas value chain for administration and middle management staff. The program is suitable for level 4 team leaders and above, geophysicists, geologists, engineers, government negotiations, exploration personnel, planning department personnel, national oil company management, petroleum and mining economists, general managers and oil minister staff.

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 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

Certificates are accredited by the following international accreditation organizations:-

- 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 **2.4 CEUs** (Continuing Education Units) or **24 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.

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. 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.

Course Fee

US$ 6,750 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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. Konstantin Zorbalas, MSc, BSc, is a **Senior Petroleum Engineer & Well Completions Specialist** with over **25 years** of **offshore** and **onshore** experience in the **Oil** & **Gas**, **Refinery** & **Petrochemical** industries. His wide expertise includes **Workovers & Completions**, **Petroleum Risk & Decision Analysis**, Electrical Submersible Pumps Application, **ESP** Assembly & Disassembly Techniques, **ESP** Modeling & Design, **ESP** Construction & Operational Monitoring, **ESP** Troubleshooting & Maintenance, **Acidizing Application** in **Sandstone** & **Carbonate**, **Well Testing Analysis**, **Stimulation Operations**, **Reserves Evaluation**, **Reservoir Fluid Properties**, **Reservoir Engineering & Simulation Studies**, **Reservoir Monitoring**, **Artificial Lift Design**, **Gas Operations**, **Workover/Remedial Operations** & **Heavy Oil Technology**, **Applied Water Technology**, **Oil & Gas Production**, **X-mas Tree** & **Wellhead Operations** & **Testing**, **Artificial Lift Systems** (**Gas Lift**, **ESP**, and **Rod Pumping**), **Well Cementing**, **Production Optimization**, **Well Completion Design**, **Sand Control**, **PLT Correlation**, **Slickline Operations**, **Acid Stimulation**, **Well testing**, **Production Logging**, **Project Evaluation** & **Economic Analysis**. Further, he is actively involved in **Project Management** with special emphasis in production technology and field optimization, performing conceptual studies, economic analysis with risk assessment and field development planning. He is currently the **Senior Petroleum Engineer & Consultant** of **National Oil Company** wherein he is involved in the mega-mature fields in the Arabian Gulf, predominantly carbonate reservoirs; designing the acid stimulation treatments with post-drilling rigless operations; utilizing CT with tractors and DTS systems; and he is responsible for gas production and preparing for reservoir engineering and simulation studies, well testing activities, field and reservoir monitoring, production logging and optimization and well completion design.

During his career life, Mr. Zorbalas worked as a **Senior Production Engineer**, **Well Completion Specialist**, **Production Manager**, **Project Manager**, **Technical Manager**, **Technical Supervisor** & **Contracts Manager**, **Production Engineer**, **Production Supervisor**, **Production Technologist**, **Technical Specialist**, **Business Development Analyst**, **Field Production Engineer** and **Field Engineer**. He worked for many **world-class oil/gas companies** such as **ZADCO**, **ADMA-OPCO**, **Oilfield International Ltd**, **Burlington Resources** (later acquired by **Conoco Phillips**), **MOBIL E&P**, **Saudi Aramco**, **Pluspetrol E&P SA**, **Wintershall**, **Taylor Energy**, **Schlumberger**, **Rowan Drilling** and **Yukos EP** where he was in-charge of the **design and technical analysis** of a gas plant with capacity **1.8 billion m3/yr gas**. His achievements include **boosting oil production 17.2% per year** since 1999 using **ESP** and **Gas Lift systems**.

Mr. Zorbalas has **Master** and **Bachelor** degrees in **Petroleum Engineering** from the **Mississippi State University**, **USA**. Further, he is an **SPE Certified Petroleum Engineer**, **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**), an active member of the Society of Petroleum Engineers (**SPE**) and has numerous scientific and technical publications and delivered innumerable training courses, seminars and workshops worldwide.

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: ***Monday, 04th of November 2024***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***The Dynamics & Value Chain of the Global Oil & Gas Industry***
0930 – 0945	*Break*
0945 – 1030	***Overview of the Oil & Gas Industry***
1030 – 1115	***Exploration Methods***
1115 - 1230	***Host Country Agreements***
1230 - 1245	*Break*
1245 – 1345	***Drilling & Well Completion***
1345 - 1420	***Reservoir Characterization & Reserve Estimation***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2: ***Tuesday, 05th of November 2024***

0730 – 0830	***Crude Oil Transportation & Pipelines: Tankers & Pipelines***
0830 - 0930	***Crude Oil Markets & Transportation: Pipelines & LNG***
0930 – 0945	*Break*
0945 – 1045	***Natural Gas Markets & Pricing***
1045 - 1130	***Field Development & Well Performance***
1130 - 1230	***Petrochemicals & Performance***
1230 - 1245	*Break*
1245 – 1315	***Measuring Financial Performance***
1315 - 1420	***Petroleum Products Distribution & Marketing***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3: ***Wednesday, 06th of November 2024***

0730 - 0830	***Gas Distribution System & Marketing***
0830 - 0930	***Introduction*** *Understand The Global Oil Demand • Factors that Affect Demand • Major Global Oil Producers • OPEC*
0930 – 0945	*Break*
0945 - 1030	***Crude Oil Market*** *Crude Oil Prices • Driving Forces Behind Global Markets • Supply vs. Demand • Market Share Phenomena*
1030 - 1130	***Oil Reserves*** *Global Oil Reserves • Types of Reserves • Distribution of Reserves by Continent & Country • Reserves Effects on Oil Prices*
1130 - 1230	***Oil Supply & Demand*** *The Balance of Supply • Global Demand of Oil • Demand Growth Rate • Factors Affecting the Demand Growth • The Renewable Energy*

1230 - 1245	*Break*
1230 - 1315	***Governmental Legislation & Contractual Agreements*** *Analyze Terms of the Contractual Agreements • Use the Financial Model to Evaluate Project Value Drivers • Identify Governmental Legislation & how it Pertains to Oil Contracts • Risk Sharing Agreements*
1315 - 1420	***Oil Projects & Their Feasibility*** *Calculate Revenue & Profitability in Oil Projects • Project Financial Models • Project Risk Analysis • Profit-Risk Curve • Evaluate Oil Projects • Study The Economic Feasibility Behind Each Project • Various Feasibility Analysis Techniques • Capital Operational Costs*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4: ***Thursday, 07th of November 2024***

0730 – 0830	***Oil & Gas Exploration*** *Introduction in the Composition of Oil & Gas Exploration Methods • Reservoir Evaluation • Project Strategy • Drilling Techniques • Environmental Impact*
0830 - 0930	***Evaluation & Delineation Drilling*** *Analyze the Extraction of Oil & Gas • Crude Oil Types & Specifications • Sulphur Contents • Sour Natural Gas • Natural Gas Sweetening*
0930 – 0945	*Break*
0945 – 1115	***Field Development & Production*** *An Introduction to Petroleum Production • Field Layout • Production Techniques • Production Control • Surface Production Operations*
1115 - 1230	***Oil Refinery & Processing*** *Initial Oil Processing (Field) • Oil Transportation-Methods • Flowmetering & Custody Transfer • Oil Refining (Refinery) • Various Petroleum Products*
1230 - 1245	*Break*
1245 - 1345	***Upstream, Midstream & Downstream*** *Upstream • Midstream • Downstream • The Responsibilities of the Different Companies • The Use of Technology in the Industrial Security • Various Security Threats • Security Risk Analysis*
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST- TEST***
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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