COURSE OVERVIEW TM0773-4D
The International Petroleum Business
A Challenging Simulation Program

Course Title
The International Petroleum Business:
A Challenging Simulation Program

Course Reference
TM0773-4D

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

Course Date/Venue

Session(s)	Date	Venue
1	January 29-February 01, 2024	Jubail Hall, Signature Al Khobar Hotel, Al Khobar, KSA
2	April 22-25, 2024	Cheops Meeting Room, Radisson Blu Hotel, Istanbul Sisli, Turkey
3	August 05-08, 2024	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
4	November 11-14, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

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.

This course is designed to provide participants with a detailed and up-to-date overview of The International Petroleum Business: A Challenging Simulation Program. It covers the energy industry with global significance, market dynamics and key driving factors; the exploration agreements and financial models; the importance and role in petroleum business, key components and stakeholders; the terms of the exploration agreement and financial model to evaluate project value drivers; and the importance and uses of seismic data in exploration and key principles of seismic survey interpretation.

Further, the course will also discuss the seismic program alternatives and selection criteria based on project needs; the operational aspects of seismic programs, mapping techniques and interpretation; the significance, methods and challenges of exploration and delineation drilling; the well location selection and evaluation techniques for formations; the purpose and components of an appraisal well program; the methods for reserve estimation and commercial evaluation; the field development strategies and reservoir management for longevity and maximum extraction; and the different field development options and selecting the best alternative of field production capacity considerations, well count and spacing optimization.

During this interactive course, participants will learn the gas processing and marketing dynamics for LPG; the gas processing alternatives and decision making; the economic implications of building a gas processing facility; the crude oil marketing and refining and ranking economic attractiveness of available crude markets; the value chain of natural gas markets including economic evaluation of power plants, petrochemical complexes and export pipelines; monitoring field and market performance and decision-making processes to maintain or enhance performance; analyzing long-term financial trends and success factors and areas of improvement; structuring decisions in a clear and logical format and applying visual tools and techniques for effective presentation; and crafting a compelling narrative, engaging stakeholders and securing buy-in.

Course Objectives

After completing the training, the employee will understand the following:-

- Apply and gain an in-depth knowledge on the international petroleum business
- Discuss the energy industry with global significance, market dynamics and key driving factors
- Review exploration agreements and financial models as well as discuss the importance and role in petroleum business, key components and stakeholders
- Explain the terms of the exploration agreement and financial model to evaluate project value drivers
- Identify importance and uses of seismic data in exploration and key principles of seismic survey interpretation
- Recognize seismic program alternatives and selection criteria based on project needs
- Identify operational aspects of seismic programs and apply mapping techniques and interpretation
- Discuss the significance, methods and challenges of exploration and delineation drilling
- Carryout well location selection and evaluation techniques for formations
- Discuss the purpose and components of an appraisal well program and apply methods for reserve estimation and commercial evaluation
- Employ field development strategies and reservoir management for longevity and maximum extraction
- Identify the different field development options and select the best alternative of field production capacity considerations, well count and spacing optimization
- Explain the gas processing and marketing dynamics for LPG
- Apply gas processing alternatives and decision making as well as discuss the economic implications of building a gas processing facility
- Carryout crude oil marketing and refining and rank economic attractiveness of available crude markets

- Describe the value chain of natural gas markets including economic evaluation of power plants, petrochemical complexes and export pipelines
- Implement holistic approach to field and market development and schedule based on capital availability
- Monitor field and market performance and apply decision-making processes to maintain or enhance performance
- Analyze long-term financial trends and identify success factors and areas of improvement
- Structure decisions in a clear and logical format and apply visual tools and techniques for effective presentation
- Craft a compelling narrative, engage stakeholders and secure buy-in

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 the international petroleum business for 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

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Workshops & Work Presentations
30% Case Studies & Practical Exercises
20% Software, Simulators & Videos

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

Accommodation

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

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 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:

Dr. Chris Kapetan, PhD, MSc, is a **Senior Petroleum Engineer** with over **30 years** of international experience within the **onshore** and **offshore oil** & **gas** industry. His wide experience covers **Decision Analytic Modelling Methods** for **Economic Evaluation**, **Probabilistic Risk Analysis** (**Monte Carlo Simulator**) **Risk Analysis Foundations**, **Global Oil Demand**, in Electrical Submersible Pumps Application, **ESP** Assembly & Disassembly Techniques, **ESP** Modeling & Design, **ESP** Construction & Operational Monitoring, **ESP** Troubleshooting & Maintenance, Crude Oil Market, Global Oil Reserves, Oil Supply & Demand, Governmental Legislation, Contractual Agreements, **Financial** Modeling, **Oil Contracts**, **Project Risk Analysis**, **Feasibility Analysis** Techniques, **Capital Operational Costs**, Oil & Gas Exploration Methods, **Reservoir** Evaluation, **Extraction of Oil & Gas**, **Crude** Oil Types & Specifications, Sulphur, Sour Natural Gas, **Natural Gas Sweeting**, **Petroleum Production**, Field Layout, **Production** Techniques & Control, **Surface Production** Operations, **Oil Processing**, Oil Transportation-Methods, **Flowmetering & Custody Transfer** and **Oil Refinery**. Further, he is also well-versed in Enhanced Oil Recovery (**EOR**), Electrical Submersible Pumps (**ESP**), **Oil Industries Orientation**, **Geophysics**, Cased Hole **Formation Evaluation**, Cased Hole **Applications**, Cased Hole **Logs**, Production **Operations**, Production **Management**, Perforating **Methods & Design**, Perforating **Operations**, **Fishing** Operations, **Well & Reservoir** Testing, **Reservoir Stimulation**, **Hydraulic Fracturing**, **Carbonate** Acidizing, **Sandstone** Acidizing, **Drilling Fluids Technology**, Drilling **Operations**, **Directional** Drilling, **Artificial Lift**, **Gas Lift Design**, **Gas Lift Operations**, **Petroleum Business**, **Petroleum Economics**, **Field Development Planning**, **Gas Lift Valve** Changing & Installation, **Well Completion** Design & Operation, Well **Surveillance**, Well **Testing**, Well **Stimulation** & **Control** and **Workover Planning**, **Completions** & **Workover**, **Rig Sizing**, **Hole Cleaning** & **Logging**, **Well Completion**, **Servicing** and **Work-Over Operations**, Practical **Reservoir Engineering**, **X-mas Tree & Wellhead** Operations, Maintenance & Testing, **Advanced Petrophysics/Interpretation** of **Well Composite**, **Construction Integrity** & **Completion**, **Coiled Tubing Technology**, **Corrosion Control**, **Slickline**, **Wireline & Coil Tubing**, **Pipeline Pigging**, **Corrosion Monitoring**, **Cathodic Protection** as well as Root Cause Analysis (**RCA**), Root Cause Failure Analysis (**RCFA**), **Gas Conditioning & Process Technology**, **Production Safety** and **Delusion of Asphalt**. Currently, he is the **Operations Consultant** & the **Technical Advisor** at **GEOTECH** and an independent **Drilling Operations Consultant** of various engineering services providers to the international clients as he offers his expertise in many areas of the **drilling & petroleum discipline** and is well **recognized & respected** for his process and procedural expertise as well as ongoing participation, interest and experience in continuing to promote technology to producers around the world.

Throughout his long career life, Dr. Chris has worked for many international companies and has spent several years **managing** technically **complex wellbore interventions** in both **drilling** & **servicing**. He is a **well-regarded** for his **process** and **procedural expertise**. Further, he was the **Operations Manager** at **ETP Crude Oil Pipeline Services** where he was fully responsible for optimum operations of crude oil pipeline, **workover** and **directional drilling**, **drilling rigs** and equipment, drilling of various geothermal deep wells and **exploration wells**. Dr. Chris was the **Drilling** & **Workover Manager** & **Superintendent** for **Kavala Oil** wherein he was responsible for supervision of **drilling operations** and **offshore exploration**, quality control of performance of **rigs**, **coiled tubing**, crude oil transportation via pipeline and abandonment of **well** as per the API requirements. He had occupied various key positions as the **Drilling Operations Consultant**, **Site Manager**, **Branch Manager**, **Senior Drilling** & **Workover Manager** & **Engineer** and **Drilling** & **Workover Engineer**, **Operations Consultant**, **Technical Advisor** in several petroleum companies responsible mainly on an **offshore** sour oil field (under water flood and gas lift) and a gas field. Further, Dr. Chris has been a **Professor** of the **Oil Technology College**.

Dr. Chris has **PhD** in **Reservoir Engineering** and a **Master** degree in **Drilling & Production Engineering** from the **Petrol-Gaze Din Ploiesti University**. Further, he is a **Certified Surfaced BOP Stack Supervisor** of **IWCF**, a **Certified Instructor/Trainer**, a **Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management** (**ILM**) and has conducted **numerous short courses**, **seminars** and **workshops** and has published several technical books on **Production Logging**, **Safety Drilling Rigs** and **Oil Reservoir**.

Course Fee

Al Khobar	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Istanbul	**US$ 5,000** per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Abu Dhabi	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Dubai	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course 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***
0830 – 0930	***Introduction & Overview of the Energy Industry*** *History, Key Players & Global Significance • Market Dynamics & Key Driving Factors*
0930 – 0945	*Break*
0945 – 1030	***Exploration Agreements & Financial Models*** *Importance & Role In Petroleum Business • Key Components & Stakeholders*
1030 – 1130	***Terms of the Exploration Agreement & Financial Model to Evaluate Project Value Drivers*** *Understanding Agreement Clauses • Tools & Techniques for Financial Model Evaluation*
1130 – 1230	***Purchase & Interpretation of Seismic Surveys*** *Importance & Uses of Seismic Data in Exploration • Key Principles of Seismic Survey Interpretation*
1230 - 1245	*Break*
1245 – 1330	***Seismic Program Alternatives*** *Traditional Vs. Modern Methods • Selection Criteria Based on Project Needs*
1330 – 1420	***Running the Seismic Program & Generating Subsurface Maps*** *Operational Aspects of Seismic Programs • Mapping Techniques & Interpretation*
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

0730 – 0830	***Exploration & Delineation Drilling*** *Significance, Methods & Challenges*
0830 – 0930	***Exploration Well Locations & Formation Evaluation Alternatives*** *Principles of Well Location Selection • Evaluation Techniques for Formations*
0930 – 0945	*Break*
0945 – 1100	***Appraisal Well Program to Quantify Reserves & Commercial Viability*** *Purpose & Components of an Appraisal Well Program • Methods for Reserve Estimation & Commercial Evaluation*
1100 – 1230	***Field Development & Reservoir Management*** *Introduction to Field Development Strategies • Basics of Reservoir Management for Longevity & Maximum Extraction*
1230 – 1245	*Break*
1245 – 1330	***Different Field Development Options & Selecting the Best Alternative*** *Field Production Capacity Considerations • Well Count & Spacing Optimization*
1330 – 1420	***Gas Processing & Marketing of LPGs*** *Introduction to Gas Processing • Marketing Dynamics for LPG*
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

0730 – 0830	***Gas Processing Alternatives & Decision Making*** *Available Technologies & Their Application Scenarios • Economic Implications of Building a Gas Processing Facility*
0830 – 0930	***Crude Oil Marketing & Refining*** *Market Structure, Players & Dynamics • Basics of Crude Oil Refining & Its Significance*
0930 – 0945	*Break*
0945 – 1100	***Ranking Economic Attractiveness of Available Crude Markets*** *Criteria for Ranking • Market Analysis Techniques*
1100 – 1230	***Markets for Associated Natural Gas*** *Understanding the Value Chain of Natural Gas Markets • Market Opportunities & Challenges*
1230 – 1245	*Break*
1245 - 1315	***Projects Economics of Infrastructure Development*** *Economic Evaluation of Power Plants, Petrochemical Complexes & Export Pipelines • Crafting a Gas Utilization Plan*
1315 – 1420	***Integrated Development Decision*** *Holistic Approach to Field & Market Development • Scheduling Based on Capital Availability*
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

0730 – 0830	***Production Maintenance Decision*** *Monitoring Field & Market Performance • Decision-Making Processes to Maintain or Enhance Performance*
0830 – 0930	***Review of 20-Year Financial Performance History*** *Analyzing Long-Term Financial Trends • Identifying Success Factors & Areas of Improvement*
0930 – 0945	*Break*
0945 – 1045	***Preparing Decisions & Results for Management*** *Structuring Decisions in a Clear & Logical Format • Visual Tools & Techniques for Effective Presentation*
1045 – 1130	***Presentation of Overall Results*** *Crafting a Compelling Narrative • Engaging Stakeholders & Securing Buy-In*
1130 - 1230	***Learnings & Reflection*** *Identifying Lessons Learned • Suggestions for Future Projects*
1230 – 1245	*Break*
1245 - 1315	***Interactive Q&A & Feedback Session*** *Engaging Participants for Questions • Gathering Feedback for Continuous Improvement*
1315 - 1330	***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*

Practical Sessions

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

Course Coordinator

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