



COURSE OVERVIEW DE0337 Petrel Fundamentals

Course Title

Petrel Fundamentals

Course Date/Venue

Session 1: February 16-20, 2025/Meeting Plus 8,
City Centre Rotana Doha Hotel, Doha,
Qatar

Session 2: August 17-21, 2025/Meeting Plus 8,
City Centre Rotana Doha Hotel, Doha,
Qatar



Course Reference

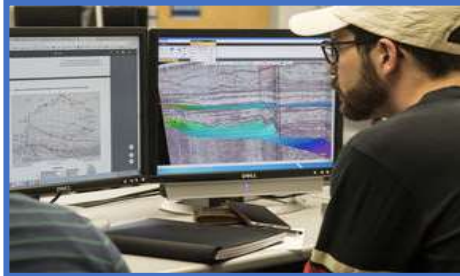
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Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

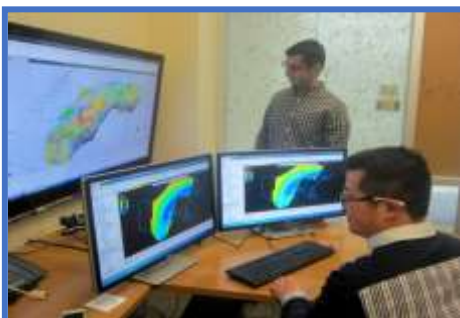
Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.



This course introduces new users to Petrel functionality with emphasis on visualization, data organization and collaboration. It covers basic usage of the application, providing an understanding of how to get started with Petrel.



During this highly interactive course, participants will learn the Petrel basic and its interface; the retrieval and preparing data; the visualization, quality check and seismic reconnaissance; the creation of surfaces and simple grid; the geometrical modeling and plotting; the Petrel user interface and finding data; reviewing the data display in the well section window and performing log editing; the well correlation, isochore and isopach processing; and the 2D gridding, quality improvement, surface editing, operations, log property mapping and map-based volume calculations.



Course Objectives

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

- Apply and gain a basic knowledge on Petrel fundamental and Petrel geology
- Discuss Petrel basics and describe its interface
- Retrieve and prepare data as well as employ visualization, quality check and seismic reconnaissance
- Create surfaces and simple grid and illustrate geometrical modeling and plotting
- Discuss Petrel user interface and find data
- Review data display in the well section window and perform log editing
- Identify well correlation, isochore and isopach processing
- Carryout 2D gridding, quality improvement, surface editing, operations, log property mapping and map-based volume calculations

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 Petrel fundamental and Petrel geology for managers, development and exploration geologists, geophysicists, geochemists, geoscientists, petroleum engineers and technical IT personnel with no prior experience in petrel software.

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

US\$ 8,500 per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.




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: -

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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.

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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.

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:

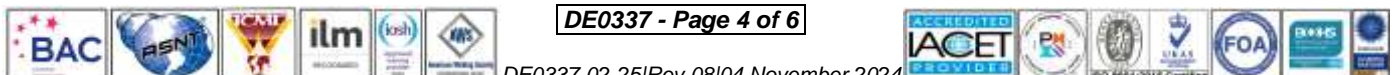


Dr. John Petrus, PhD, MSc, BSc, is a Senior Reservoir Engineer & Geologist with over 30 years of onshore & offshore experience within the Oil & Gas, Refinery and Petroleum industries. His wide experience covers in the areas of Production Technology & Engineering, Well Completions, Well Logs, Well Stimulation & Production Logging, Well Completion Design & Operation, Well Surveillance, Well Testing, Well Stimulation & Control and Workover Planning, Completions & Workover, Hole Cleaning & Logging, Servicing and Work-Over Operations, Wellhead Operations, Maintenance & Testing, Petrophysics/Interpretation of Well Composite, Reservoir & Tubing Performance, Practical Reservoir Engineering, Clastic Exploration & Reservoir Sedimentology, Carbonate Reservoir Characterization & Modeling,

Seismic Interpretation, Mapping & Reservoir Modelling, Reservoir Geology, Integrating Geoscience into Carbonate Reservoir Management, Faulted & Fractured Reservoirs, Fractured Hydrocarbon Reservoirs, Analyses, Characterisation & Modelling of Fractured Reservoirs & Prospects, Fracture Reservoir Modeling Using Petrel, Reservoir Engineering Applied Research, Artificial Lift, Artificial Lift System Selection & Design, Electrical Submersible Pumps (ESP), Enhance Oil Recovery (EOR), Hydraulic Fracturing, Sand Control Techniques, Perforating Methods & Design, Perforating Operations, Petroleum Exploration & Production, Hydrocarbon Exploration & Production, Exploration & Production, Play Assessment & Prospect Evaluation, Formation Evaluation, Petroleum Engineering Practices, Petroleum Hydrogeology & Hydrodynamics, Project Uncertainty, Decision Analysis & Risk Management, Decision Analysis & Uncertainty Management, Exploration & Development Geology, Sedimentology & Sequence Stratigraphy, Structural Interpretation in Exploration & Development, Petrel Geology, Geomodeling, Structural Geology, Applied Structural Geology in Hydrocarbon Exploration, Petrophysics, Geology of the Oil & Gas Field, Geophysics, Geothermal, Geochemical & Geo-Engineering and Drilling Applied Research, Field Geological Outcrop Mapping & Digital Cartography, Geological Modelling, Geoscience Management in E&P, Geoscience Modelling, Geological Mapping, Structural Geology-Tectonics, Structural Analysis, Tectonic Modelling and Numerical Simulation of Fractured Prospects & Reservoirs, Fracture Network Analysis & Modelling, Prospect Generation, Global Networking, Research and Technology Development Management for Fault & Fracture Analyses & Modelling, Fracture Modelling, Dynamic Modelling, Field Development Planning, Water Injection Planning, Stereophotogrammetry, Fault Mapping, GPS Survey, 2D & 3D Seismic Acquisition & Processing, 3D Seismic Surveys & Mapping, 3D GIS, GMAP, Sandbox Modelling, Sedimentological Logging, GR Logging, Surface & Subsurface 3D Modelling, Best Practices Management System (BPMS), Subsurface Work for Energy Projects, Digitalization Projects, Structural Model using Petrel, G&G Seismic & Well Data Modelling, GIS System Management, Database Management, Strategic Planning, Best Practices and Workflow, Quality Management, Project Management and Risk Assessment & Uncertainty Evaluation. Further, he is also well-versed in seismic interpretation, mapping & reservoir modelling tools like Petrel software, LandMark, Seisworks, Geoframe, Zmap and has extensive knowledge in MSDos, Unix, AutoCAD, MAP, Overlay, Quicksurf, 3DStudio, Esri ArcGIS, Visual Lisp, Fortran-77 and Clipper. Moreover, he is a world expert in analysis and modelling of fractured prospects and reservoirs and a specialist and developer of fracture modelling software tools such as FPDM, FMX and DMX Protocols.

During his career life, Dr. Petrus held significant positions and dedication as the **Executive Director, Senior Geoscience Advisor, Exploration Manager, Project Manager, Manager, Chief Geologist, Chief of Exploration, Chief of Geoscience, Senior Geosciences Engineer, Senior Explorationist, Senior Geologist, Geologist, Senior Geoscientist, Geomodeller, Geoscientist, CPR Editor, Resources Auditor, Project Leader, Technical Leader, Team Leader, Scientific Researcher and Senior Instructor/Trainer** from various international companies and universities such as the Dragon Oil Holding Plc., ENOC, MENA, ENI Group of Companies, Ocre Geoscience Services (OGS), Burren RPL, Ministry of Oil-Iraq, Eni Corporate University, Stanford University, European Universities, European Research Institutes, NorskHydro Oil Company, Oil E&P Companies, just to name a few.

Dr. Petrus has a **PhD in Geology and Tectonophysics and Master's and Bachelor's degree in Earth Sciences** from the **Utrecht University, The Netherlands**. Further, he is a **Certified Instructor/Trainer, a Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)**, a Secretary and Treasurer of Board of Directors of Multicultural Centre, Association Steunfonds SSH/SSR and Founding Member of Sfera Association. He has further published several scientific publications, journals, research papers and books and delivered numerous trainings, workshops, courses, seminars and conferences internationally.





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	Petrel Basics & Interface
0930 - 0945	Break
0945 - 1100	Retrieve & Prepare Your Data
1100 - 1230	Visualization & QC
1230 - 1245	Break
1245 - 1420	Seismic Reconnaissance
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2

0730 - 0930	Make Surfaces
0930 - 0945	Break
0945 - 1100	Make Simple Grid
1100 - 1230	Geometrical Modeling
1230 - 1245	Break
1245 - 1420	Plotting
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3

0800 - 0930	Petrel User Interface
0930 - 0945	Break
0945 - 1100	Find Your Data
1100 - 1230	Data Display in the Well Section Window
1230 - 1245	Break
1245 - 1420	Log Editing
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 - 0930	Well Correlation
0930 - 0945	Break
0945 - 1100	Isochore & Isopach Processing
1100 - 1230	2D Gridding & Quality Improvement
1230 - 1245	Break
1245 - 1420	Surface Editing & Operations
1420 - 1430	Recap
1430	Lunch & End of Day Four



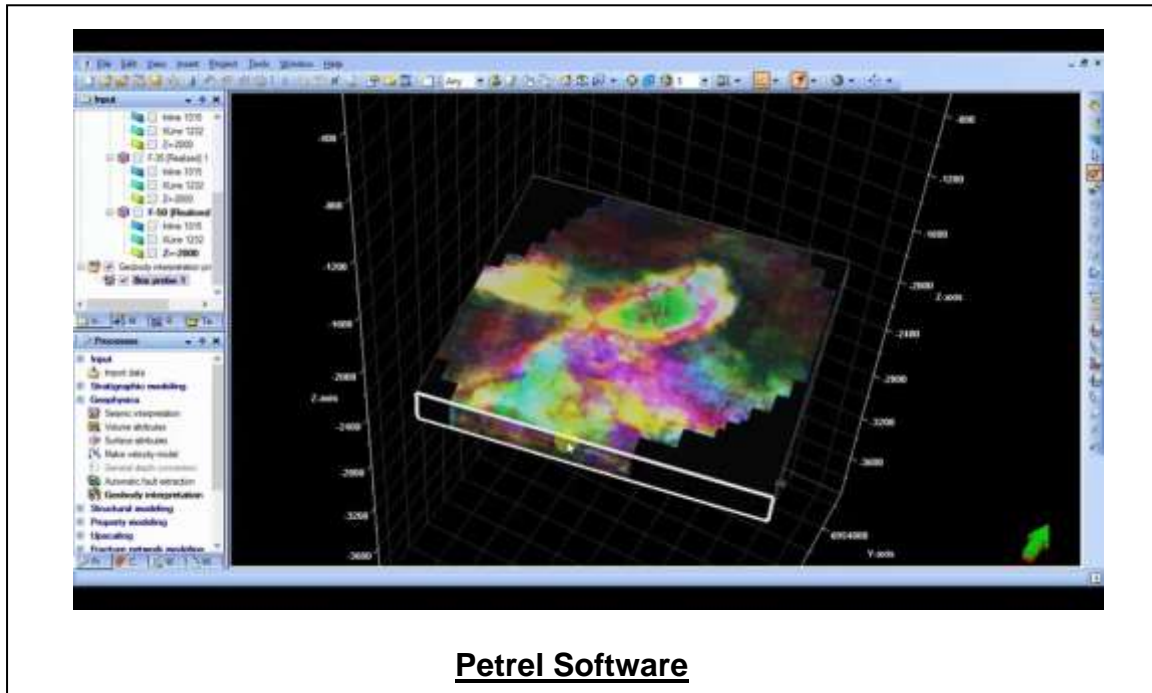


Day 5

0730 - 0930	<i>Log Property Mapping</i>
0930 - 0945	<i>Break</i>
0945 - 1100	<i>Log Property Mapping (cont'd)</i>
1100 - 1230	<i>Map-Based Volume Calculations</i>
1230 - 1245	<i>Break</i>
1245 - 1345	<i>Map-Based Volume Calculations (cont'd)</i>
1345 - 1400	<i>Course Conclusion</i>
1400 - 1415	POST-TEST
1415 - 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

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 one of our state-of-the-art simulators “Petrel software”.



Course Coordinator

Reem Dergham, Tel: +974 4423 1327, Email: reem@haward.org

