



COURSE OVERVIEW DE0100 **Well Completion Design & Operations, Well Stimulation and** **Workover Planning**

Course Title

Well Completion Design & Operations, Well Stimulation and Workover Planning

Course Date/Venue

October 19-23, 2026/Albatross Meeting Room, VOGO Abu Dhabi Golf Resort & Spa Formerly Westin Abu Dhabi Golf Resort & Spa, Abu Dhabi, UAE

Course Reference

DE0100

Course Duration/Credits

Five days/2.75 CEUs/27.5 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 is primarily designed for drilling, production and completion engineers and supervisors needing a practical understanding and an appreciation of well completion design and operations, well stimulation and work over planning. It explains how completion configurations are varied to meet well objectives and to maximize well productivity. Design concepts and methods are presented together with downhole tools and their selection criteria.



Completion types and design for vertical, horizontal and multilateral wells, design and optimization of tubing based on tubing performance analysis (Inflow performance analysis, liquid and gas hold up during fluid flow and forces on tubing), downhole equipment, tubing accessories, wellhead equipment including sub sea completion. Also, fluid flow through perforations and perforation techniques; communication tests; wireline operations; reservoir stimulation; and hydraulic fracture treatment design and optimization are extensively reviewed. Local case studies are also provided.



Course Objectives/Outcomes & Benefits for the Participants

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

- Apply systematic techniques in well testing, completion and operations, well stimulation and workover
- Optimize tubing dimensions for maximum production and estimate the pressure losses in tubing for different rock & fluid properties
- Use different subsurface completion equipments and accessories and select packers and packer settings
- Operate the well head equipments properly and calculate geometries and dimensions casing and tubing hangers
- Identify the different special consideration for horizontal and multilateral completions on wellbore, tubing and casing configuration
- Recognize the components of perforation of oil and gas wells such as completion fishing operations, well stimulation and fracturing, well testing, and well integrity
- Carryout the various procedures of communication tests
- Practice the process of wireline operations
- Discuss the elements of reservoir stimulation and increase the knowledge in understanding of stress and rock properties involved in the simulation techniques

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 covers systematic techniques and methodologies on well testing, completion and operation, well stimulation and workover for well and senior petroleum engineers, drilling and senior drilling supervisors, reservoir and senior reservoir engineers, geologists, production and completion engineers and supervisors needing a practical understanding and an appreciation of well completion design and operation, well stimulation and work over planning.

Course Fee

US\$ 8,000 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 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 **2.75 CEUs** (Continuing Education Units) or **27.5 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 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. Victor Saran, MSc, BSc, is a **Senior Drilling & Petroleum Engineer** with over **30 years** of **offshore & onshore** experience within the **Oil & Gas** and **Petroleum** industries. His wide expertise covers **Wellhead Testing & Operations, Well Stimulation & Reservoir Management, Well Performance, Well Servicing, Well Killing Procedures, Well Completion, Well Fracturing, Well Testing, Acid Additives, Perforating Techniques, Sandstone Acidizing, Carbonate Acidizing, Acid Fracturing, Production Engineering, Well Monitoring & Testing, Applied Reservoir Engineering, Water Flooding, Workover & Completions, Injection Systems, Artificial Lift Systems, Gas Lift, ESP, Rod Pumping, Production Testing & Optimization, Slickline** and Electric Line Operations, **Perforating & Logging, Coiled Tubing** Operations, Nozzles, Motors, Deposits Removal & Inhibition and **Asphaltenes-Sulphates**, Workover Completion, Water Injection & Gas Lift, Nodal Analysis, Drill Stem Testing, H₂S Crude Oil and Oil & Gas Production. Further, he is also well-versed in risk assessments, pipelines construction, pump & loading terminals, material and services procurement, budgeting, contracts & logistics, safety and personnel issues, tendering procedures, budget and work program, cost control–cost recovery, selection of materials and services and quality control. Currently, he is the **Country Manager of Energean Oil & Gas** wherein he is responsible in organizing and supervising the drilling of exploration wells and well connections and testing.

During Mr. Saran's life, he has gained his practical and field experience through his various significant positions as the **Completions Consultant, Lecturer/Instructors, Part-Time Assistant Lecturer, Part-Time Instructor, Technical Consultant, Drilling & Workover Manager, Production Manager, Production Engineer, Petrochemical Engineer, Mechanical Engineer, Petroleum Services Engineer** for numerous international companies and universities that includes **Lukoil Neftochim, J&P Avax, Kavala Oil Greece, North Aegean Petroleum Company, Petrola International, Dowell Schlumberger, Technological Institute of Kavala, University of Thessaloniki and University of Crete**.

Mr. Saran has a **Master & Bachelor** degrees in **Petroleum Engineering** from the **University of Westminster London, UK**. Further, he is a **Certified Instructor/Trainer, a Certified Trainer/Assessor** by the **Institute of Leadership & Management (ILM)** and has conducted numerous trainings, workshops and conferences worldwide.



Training Methodology

Our courses employ an interactive, learner-centred methodology that integrates theoretical knowledge with practical application. The training is delivered through a suitable combination of some or all of the following methods, selected according to the course content and learning objectives:

- Instructor-led presentations and facilitated discussions
- Practical workshops and participant presentations
- Hands-on exercises and real-world case studies
- Equipment demonstrations and technical drawings
- Hardware- and software-based simulations
- Gamification & Role Play in soft-skills courses only
- Virtual Reality (VR) and Augmented Reality (AR)
- Instructional videos and other relevant training resources

This blended approach encourages active participation, strengthens practical skills and supports the effective application of acquired knowledge in the workplace.

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 course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: Monday, 19th of October 2026

0800 – 0830	Registration & Coffee
0830 – 0845	Welcome & Introductions
0845 – 0900	PRE-TEST
0900 – 0930	Well Completion Design Single & Dual Completion Design (Packers, Nipples, Tubing, DHSV's, Blast Joints Flow Couplings, Seal Assemblies, Expansion Joints, WLEG, Sliding Sleeves, Ported Nipples) • Planning Essentials Prior to Drilling (Safety, Economics)
0930 – 0945	Break
0945 – 1100	Well Completion Design (cont'd) Wellbore Tubing-Casing Configuration • Completion Procedures (Well Completion Fluids, Well Control & Damage Prevention)
1100 – 1200	Well Completion Design (cont'd) Work Over Considerations • Artificial Lift Requirements on Completion Design
1200 – 1215	Break



1215 – 1350	Well Completion Design (cont'd) Inflow Performance • Completion Variations (Primary Completion - Oil & Gas Wells, Multiple Completion, Secondary Recovery Production Well Completion & Injection Well Completion)
1350 – 1400	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
1400	Lunch & End of Day One

Day 2: Tuesday, 20th of October 2026

0800 – 0930	Interval Selection Consideration & Optimization of Tubing Dimensions for Maximum Production Production Mechanism for Different Reservoir Types • Completion Efficiency Consideration • Inflow Performance Relationship (IPR) & Effect of Partial Penetration on IPR
0930 - 0945	Break
0945 – 1100	Interval Selection Consideration & Optimization of Tubing Dimensions for Maximum Production (cont'd) Typical IPR Case Studies for Both Oil & Gas Reservoirs • Bottom Hole Flowing Pressure Requirements
1100 – 1200	Interval Selection Consideration & Optimization of Tubing Dimensions for Maximum Production (cont'd) Estimation of Pressure Losses in Tubing for Different Rock & Fluid Properties • Development of Tubing Performance Curve & Optimization of Tubing Dimensions for Maximum Production
1200 - 1215	Break
1215 – 1350	Interval Selection Consideration & Optimization of Tubing Dimensions for Maximum Production (cont'd) Prediction Rate & Selection of Material Properties Based on Analysis of Forces on Tubing of Tubing • Specialized Software's are Used for Case Studies & Analysis
1350 – 1400	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
1400	Lunch & End of Day Two

Day 3: Wednesday, 21st of October 2026

0800 – 0930	Subsurface Completion Equipment & Accessories Forces on Packers & Tubing Movements • Completion Material Selection • Completion of Running & Retrieving • Selection Consideration of Packers & Packer Settings
0930 - 0945	Break
0945 – 1100	Subsurface Completion Equipment & Accessories (cont'd) Tubing Accessories & Subsurface Safety and Flow Control Valves • Typical Case Studies
1100 – 1200	Well Head Equipment Geometries & Dimensions Casing & Tubing Hanger • Well Heads for Topside & Subsea Completions • Christmas & Subsea Trees
1200 - 1215	Break



1215 – 1350	Well Head Equipment (cont'd) Flow Line, Cokes & Other Control • Valves & Flow Regulating Valves
1350 – 1400	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
1400	Lunch & End of Day Three

Day 4: Thursday, 22nd of October 2026

0800 – 0930	Special Consideration for Horizontal & Multilateral Completions Wellbore, Tubing & Casing Configuration • Well Killing • Tubing Size Selection • Special Equipment for Horizontal & Multilateral Completions • Running & Operational Procedure of Subsurface Equipment
0930 - 0945	Break
0945 – 1100	Perforation of Oil & Gas Wells Completion Fishing Operations • Perforation Methods & Equipment • Well Perforating & Cased Hole Logs • Well Stimulation & Fracturing • Well Testing • Well Integrity
1100 – 1200	Perforation of Oil & Gas Wells (cont'd) Basics of Shape Charge & its Penetration Mechanism • Selection & Evaluation of Shape Charge • API Testing Procedure of Shape Charge Penetration • Shape Charge Gun Categories & Their Application
1200 - 1215	Break
1215 – 1350	Perforation of Oil & Gas Wells (cont'd) Special Tools & Operations • Calculation of Flow Through Perforation Tunnels & Estimation Production from the Perforation Interval • Nitrogen Lifting • Coiled Tubing Operations
1350 – 1400	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
1400	Lunch & End of Day Four

Day 5: Friday, 23rd of October 2026

0800 – 0930	Communication Tests
0930 - 0945	Break
0945 – 1100	Wireline Operations
1100 – 1200	Reservoir Stimulation Introduction to Different Stimulation Techniques • Understanding of Stress & Rock Properties Involved in the Selection of Stimulation Techniques • Design Procedure of Hydraulic Fracture Treatment
1200 - 1215	Break
1215 – 1315	Reservoir Stimulation (cont'd) Economic Evaluation of Stimulation Treatment Coupled with a Production • Model Based on NPV • Specialized Softwares Used for Local Case Studies and Analysis
1315 – 1330	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
1330 – 1345	POST-TEST
1345 – 1400	Presentation of Course Certificates
1400	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 the “PROSPER” simulator.

The image displays the PROSPER simulator interface, which is titled "PROSPER MULTIPHASE WELL AND PIPELINE NODAL ANALYSIS". The interface is divided into several sections, each representing a different simulation capability:

- WELL AND PIPELINE MODELS**: A 3D rendering of an oil well and its associated pipeline system.
- FULLY COMPOSITIONAL**: A graph showing the composition of the fluid over time or distance.
- INFLOW/OUTFLOW RESPONSE**: A graph showing the response of the well to changes in inflow or outflow.
- STEAM WELLS**: A 3D rendering of a steam well.
- OUTFLOW (VLPs) MODELS**: A graph showing the outflow response of the well.
- FLOW ASSURANCE**: A 3D rendering of a wellbore and its surrounding reservoir.
- ARTIFICIAL LIFT SYSTEMS**: A 3D rendering of an artificial lift system, such as a pumpjack.
- THERMAL MODELLING**: A diagram showing the thermal profile of a wellbore.
- PERFORATION DESIGN AND PERFORMANCE**: A 3D rendering of a wellbore with perforations.
- MULTILATERAL COMPLETIONS**: A graph showing the performance of a multilateral well.
- INFLOW (IPRs) MODELS**: A graph showing the inflow response of the well.

Course Coordinator

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