

## COURSE OVERVIEW DE0246(DP1) Production & Completions Engineering

### Course Title

Production & Completions Engineering

### Course Date/Venue

Session 1: April 28-May 02, 2025/Fujairah  
Meeting Room, Grand Millennium Al  
Wahda Hotel, Abu Dhabi, UAE  
Session 2: October 26-30, 2025/Boardroom 1,  
Elite Byblos Hotel Al Barsha, Sheikh  
Zayed Road, Dubai, UAE

### Course Reference

DE0246(DP1)

### Course Duration/Credits

Five days/3.0 CEUs/30 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.***

This course will provide the participants a general understanding of the role of production technology and engineering in multi-disciplines. It introduces a broad array of important daily production technology practices to team members. Terminologies, expressions and basic calculations regularly utilized by production technicians will be covered during the course.

Further, the course will also discuss the conventional completions; the advanced well completions; the artificial lift; perforating; the production logging for monitoring and detection of problems; the causes, identification, drilling period, W.O. period and production period of formation damage; the matrix acidizing and formation damage removal; the reasons for skin damage; the best method for removal; the criteria for acid mixture; the lab testing prior to mixing and pumping; the hydraulic fracturing; the sand control; the isolation of wet zones; and the reasons for W.O. methods and economics.

### Course Objectives

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

- Apply and gain an in-depth knowledge on well completion, reservoir and tubing performance, artificial lift, well stimulation and production logging
- Discuss the conventional completions covering wellbore completion concepts, completion criteria, multiple zone completion, advantages and disadvantages, completion equipment, packers and types, nipples, SSD's, SPM's and tubing selection to fulfill the production demands
- Explain advanced well completions including dual and multi string completion and segregation of production zones as well as reservoir and tubing performance including inflow and tubing performance, flow through chokes, completion and optimization of production
- Select and design artificial lift comprising of ESPs, gas lift, PCPs, beam pumps and hydraulic pumps including the applicable methods, description and restrictions in the area
- Identify perforating as well as guns, types of maximum penetration and selection criteria
- Carryout production logging for monitoring and detection of problem as well as present and select criteria to achieve the well's demand
- Determine the causes, identification, drilling period, W.O. period and production period of formation damage
- Illustrate matrix acidizing and formation damage removal as well as detect reasons for skin damage, select the best method for removal, identify criteria for acid mixture and apply lab testing prior to mixing and pumping
- Recognize hydraulic fracturing covering its concepts, programs, applications, testing prior to execution and preparations for fracturing
- Employ sand control by identifying the causes, treatments and installation of sand screens with completion
- Describe isolation of wet zones and discuss the reasons for W.O. methods and economics

### Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive "Howard 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 well completion, reservoir and tubing performance, artificial lift, well stimulation and production logging for trainee production engineers, petroleum engineers and specialist service company engineers.

### 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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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.

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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.

### 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. Yasser Almasood** is a **Senior Petroleum Engineer** with almost **20 years** of industrial experience within the, **Oil & Gas, Refinery** and **Petrochemical** industries. His wide expertise covers in the areas of **Gas Condensate Reservoir Management, Gas Condensate Fields Development, Hydrocarbon Reservoir, Production Operations, Process Reactor Operation & Troubleshooting, Catalytic Reactors, Heat Exchanger, Distillation Columns, Pumps, Distributed Control System (DCS), Catalytic Reformer Unit, Polymerization, Dehydrogenation, Gas Processing Plant Operations & Control, Gas Processing Monitoring & Troubleshooting, Process Plant Start-up Commissioning & Troubleshooting, Process Plant Optimization & Energy Conservation, Process Equipment Design & Troubleshooting, Advanced Operation Skills, Refinery Process Yield Optimization, Oil & Gas Processing, Troubleshooting Oil & Gas Processing Facilities, Polymers & Polymerization, Applied Process Engineering, Process Plant Troubleshooting & Engineering Problem Solving, Process Plant Performance & Efficiency, Flare Blowdown & Pressure Relief Systems, Polypropylene Manufacturing, Polyethylene & Process Troubleshooting, Ammonia, Ethylene, Solvents, Gas Feed, EDC, VCM, PP, PVC, Chlorine, Fluidized Bed Reactor, Oil Movement & Storage, Power Plant Chemistry, Catalyst Manufacturing Techniques, Fuel Systems Management, Process Design & Optimization, Desalination Processes, Reverse Osmosis and Molecular Sieves.** Further, he is also well-versed in **HAZOP, Advanced Process Hazard Analysis, Safety Management, Environmental Safety Management, LOPA & SIL, Process Safety Management (PSM), Incident investigation & Root Cause Analysis, Emergency & Crisis Management, Safety Audit & Site, Inspection, Inspection of Fire Equipment & Tools, Fire Protection & Prevention, Worker Protection from Radiation Work Permits, IGC International General Certificate in Occupational Safety & Health, Risk Assessment, Risk Associated with Low Level Radiation Exposure, Hydrogen Sulfide (H<sub>2</sub>S) Safety, Personal Protective Equipment, Lock-Out & Tag-Out, OSHA Occupational Safety & Health, Radiation & Contamination, Scientific Notation, Exposure Rate & Shielding Calculations, Excavations & Trenching, Permit-to-Work, AspenTech, Aspen HYSYS, Pro II, exSILentia, OLGA, Flare System Analyzer, Aspen PIMS, DYN SIM, RiskWISE, MS Office and IBM Maximo.**

During his career life, Mr. Yasser has gained his practical and field experience through his various significant positions and dedication as the **Senior Process Engineer, Process Engineer, Oil & Gas Process & Safety Instructor, On-Job Instructor, Process Senior Operator, Acting DCS Operator** and **Shift Controller** for various multi-national companies such as the **ADNOC Gas Processing (GASCO), Conoco Phillips Gas Plant** and **Syrian Gas Company (SGC).**

Mr. Yasser has a **Bachelor's** degree in **Petroleum Engineering.** Further, he is a **Certified Instructor/Trainer, a Certified Trainer/Assessor/Internal Verifier** by the **Institute of Leadership & Management (ILM)** and has further delivered numerous training, courses, workshops, seminars and conferences worldwide.

### 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\$ 8,000** 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 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	<i>Registration &amp; Coffee</i>
0800 – 0815	<i>Welcome &amp; Introduction</i>
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Conventional Completions</b> <i>Wellbore Completion Concepts • Completion Criteria • Multiple Zone Completion • Advantages &amp; Disadvantages</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Conventional Completions (cont'd)</b> <i>Completion Equipment • Packers &amp; Types • Nipples, SSD's, SPM's &amp; Tubing Selection to Fulfill the Production Demands</i>
1100 – 1230	<b>Advanced Well Completions</b> <i>Dual Completion • Multi String Completion</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Advanced Well Completions (cont'd)</b> <i>Segregation of Production Zones</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day One</i>

#### **Day 2**

0730 – 0930	<b>Reservoir &amp; Tubing Performance</b> <i>Inflow Performance • Tubing Performance • Flow Through Chokes</i>
0930 – 0945	<i>Break</i>
0945 – 1045	<b>Reservoir &amp; Tubing Performance (cont'd)</b> <i>Completion • Optimization of Production</i>

1045 – 1230	<b>Selection &amp; Design of Artificial Lift</b> <i>Applicable Methods in Area • ESPs • Gas Lift • PCPs</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Selection &amp; Design of Artificial Lift (cont'd)</b> <i>Beam Pumps • Hydraulic Pumps • Description &amp; Restrictions for Application in the Area</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Two</i>

**Day 3**

0730 – 0930	<b>Perforating</b> <i>Guns • Types Maximum Penetration</i>
0930 – 0945	<i>Break</i>
0945 – 1045	<b>Perforating (cont'd)</b> <i>Selection Criteria</i>
1045 – 1230	<b>Production Logging for Monitoring and Detection of Problem</b> <i>Short Presentation &amp; Selection Criteria to Achieve the Well's Demands</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Production Logging for Monitoring and Detection of Problem (cont'd)</b> <i>Short Presentation &amp; Selection Criteria to Achieve the Well's Demands (cont'd)</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Three</i>

**Day 4**

0730 – 0930	<b>Formation Damage</b> <i>Causes &amp; Identification • Drilling Period</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Formation Damage (cont'd)</b> <i>W.O Period • Production Period</i>
1100 – 1230	<b>Matrix Acidizing</b> <i>Formation Damage Removal • Detect Reasons for Skin Damage • Select the Best Method for Removal</i>
1230 – 1245	<i>Break</i>
1245 – 1420	<b>Matrix Acidizing (cont'd)</b> <i>Criteria for Acid Mixture • Lab Testing Prior Mixing &amp; Pumping</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Four</i>

**Day 5**

0730 – 0930	<b>Hydraulic Fracturing</b> <i>Concept, Programs &amp; Applications • Testing Prior Execution of Fracturing</i>
0930 – 0945	<i>Break</i>
0945 – 1100	<b>Hydraulic Fracturing (cont'd)</b> <i>Preparations for Fracturing</i>
1100 – 1230	<b>Sand Control</b> <i>Causes, Treatments &amp; Installation of Sand Screens with Completion</i>
1230 – 1245	<i>Break</i>
1245 – 1345	<b>Isolation of Wet Zones</b> <i>Reasons for W.O. Methods &amp; Economics</i>
1345 – 1400	<b>Course Conclusion</b>
1400 – 1415	<b>POST TEST</b>
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch &amp; End of Course</i>

**Practical Sessions**

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



**Course Coordinator**

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