

COURSE OVERVIEW DE0134
Introduction to Completion Design

Course Title

Introduction to Completion Design

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

DE0134

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes real-life case studies 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 Completion Selection and Design. It covers the purpose, objectives and key components of completion design and the safety considerations during completion design; analyzing reservoir properties for completion design and the importance of reservoir properties in designing completions; the completion design strategies; the horizontal versus vertical wells and open-hole versus cased-hole completions; and the perforating and stimulation techniques.



During this interactive course, participants will learn the tubing and casing selection and the types and factors to consider when selecting tubing and casing; the perforating techniques, gravel packing and frac packing techniques, sand control techniques and artificial lift techniques; the types of perforating guns and charges, gravel and proppant used in packing, sand control methods and artificial lift; designing and executing perforating treatments, gravel packing and frac packing treatments, sand control treatments and artificial lift treatments; the applications of perforating, gravel packing and frac packing, sand control and artificial lift in completion design; evaluating the effectiveness of completions, analyzing and interpreting post-completion data; and applying completion evaluation in reservoir management.



Course Objectives

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

- Apply and gain an in-depth knowledge on completion selection and design
- Discuss the purpose, objectives and key components of completion design and identify safety considerations during completion design
- Analyze reservoir properties for completion design and identify the importance of reservoir properties in designing completions
- Employ completion design strategies and discuss horizontal versus vertical wells and open-hole versus cased-hole completions and perforating and stimulation techniques
- Carryout tubing and casing selection and recognize the types and factors to consider when selecting tubing and casing
- Apply perforating techniques, gravel packing and frac packing techniques, sand control techniques and artificial lift techniques
- Identify the types of perforating guns and charges, gravel and proppant used in packing, sand control methods and artificial lift
- Design and execute perforating treatments, gravel packing and frac packing treatments, sand control treatments and artificial lift treatments
- Employ proper applications of perforating, gravel packing and frac packing, sand control and artificial lift in completion design
- Evaluate the effectiveness of completions, analyze and interpret post-completion data and apply completion evaluation in reservoir management

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 completion selection and design for those who are interested and involved in the drilling industry including drilling engineers, well engineers, completion engineers, reservoir engineers, and production engineers who are involved in the planning, design, and operation of drilling and completion activities.

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

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**. 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 **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. 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 **Cementing, Workovers & Completions, Horizontal & Multilateral Wells Design, Geomechanics, Drilling Bits Selection & Hydraulics, Advanced HPHT Well Intervention, Workover & Completions, Completion Selection & Design, Petroleum Risk & Decision Analysis, 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's and Bachelor's** degree 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 director(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 & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Introduction to Completion Selection & Design <i>The Purpose & Objectives of Completion Selection & Design • Key Components of Completion Design including Tools, Equipment & Personnel • Safety Considerations During Completion Design</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Reservoir Properties <i>Analysis of Reservoir Properties for Completion Design</i>
1100 – 1230	Reservoir Properties (cont'd) <i>Importance of Reservoir Properties in Designing Completions</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Reservoir Properties (cont'd) <i>Importance of Reservoir Properties in Designing Completions (cont'd)</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0930	Completion Design Strategies <i>Horizontal Versus Vertical Wells • Open-Hole Versus Cased-Hole Completions</i>
0930 – 0945	<i>Break</i>
0945 – 1045	Completion Design Strategies (cont'd) <i>Perforating & Stimulation Techniques</i>
1045 – 1230	Tubing & Casing Selection <i>Types of Tubing & Casing</i>
1230 – 1245	<i>Break</i>
1245 – 1420	Tubing & Casing Selection (cont'd) <i>Factors to Consider When Selecting Tubing & Casing</i>
1420 - 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0930	Perforating Techniques <i>Types of Perforating Guns & Charges • Design & Execution of Perforating Treatments</i>
0930 – 0945	<i>Break</i>
0945 – 1045	Perforating Techniques (cont'd) <i>Applications of Perforating in Completion Design</i>
1045 – 1230	Gravel Packing & Frac Packing <i>Types of Gravel & Proppant Used in Packing</i>



1230 – 1245	Break
1245 – 1420	Gravel Packing & Frac Packing (cont'd) Design & Execution of Gravel Packing & Frac Packing Treatments • Applications of Gravel Packing & Frac Packing in Completion Design
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

0730 – 0930	Sand Control Techniques Types of Sand Control Methods, Including Screens, Slotted Liners & Gravel Packing • Design & Execution of Sand Control Treatments
0930 – 0945	Break
0945 – 1045	Sand Control Techniques (cont'd) Applications of Sand Control in Completion Design
1045 – 1230	Artificial Lift Techniques Types of Artificial Lift, including Rod Pumps, Gas Lift & Electric Submersible Pumps • Design & Execution of Artificial Lift Treatments
1230 – 1245	Break
1245 – 1420	Artificial Lift Techniques (cont'd) Applications of Artificial Lift in Completion Design
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5

0730 – 0930	Completion Evaluation Post-Completion Evaluation • Techniques for Evaluating the Effectiveness of Completions
0930 – 0945	Break
0945 – 1045	Completion Evaluation (cont'd) Analysis & Interpretation of Post-Completion Data
1045 – 1230	Completion Evaluation (cont'd) Applications of Completion Evaluation in Reservoir Management
1230 – 1245	Break
1245 – 1345	Best Practices & Case Studies Review of Case Studies from Actual Completion Selection & Design Operations • Discussion of Best Practices & Lessons Learned • Opportunities for Improvement & Innovation in Completion Selection & Design • Future Trends & Developments in Completion Selection & Design
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

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org