

**COURSE OVERVIEW FE0586-4D**  
**ASME B31.8 Gas Transportation Piping Code**

**Course Title**

ASME B31.8 Gas Transportation Piping Code

**Course Date/Venue**

September 09-12, 2024/ Fujairah Meeting Room,  
 Grand Millennium Al Wahda Hotel, Abu Dhabi,  
 UAE

**Course Reference**

FE0586-4D

**Course Duration/Credits**

Four days/2.4 CEUs/24 PDHs

**Course Description**



***This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using the simulator “CAESAR II”.***

This course covers the design, fabrication, installation, inspection and testing of pipeline and piping facilities used for the transportation of gas. The course also covers safety aspects of the operation and maintenance of those facilities.



It will further discuss the ASME codes including the contents of ASME B31.8 as well as the use of appropriate materials, equipment, welding method and end preparation for butt welding; enumerate piping systems fabrication details, supports and anchorage for exposed piping and perform designing, installation and testing for steel and non-metallic materials as well as controlling and limiting of gas pressure.



Moreover, the participants will be able to determine valves, meters and regulators in gas transportation process; operate procedures affecting the safety of gas transmission systems and list the class location guidelines; apply maintenance of pipelines and distribution piping, corrosion control and criteria for cathodic protection; determine the remaining strength of corroded pipe and estimate strain in dents; carryout offshore gas transmission systems, gas leakage control criteria, on bottom, hydrostatic stability and recommend practice for hydrostatic testing; explain sour gas service including the additional operation and maintenance consideration; employ welding and inspection tests; and identify stress corrosion phenomena.

### Course Objectives

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

- Apply and gain an in-depth knowledge on ASME B31.8 gas transportation piping code
- Discuss ASME codes including the contents of ASME B31.8
- Use appropriate materials, equipment, welding method and end preparation for buttwelding
- Enumerate piping systems fabrication details, supports and anchorage for exposed piping
- Perform designing, installation and testing for steel and non-metallic materials as well as controlling and limiting of gas pressure
- Determine valves, meters and regulators in gas transportation process
- Operate procedures affecting the safety of gas transmission systems and list the class location guidelines
- Apply maintenance of pipelines and distribution piping, corrosion control and criteria for cathodic protection
- Determine the remaining strength of corroded pipe and estimate strain in dents
- Carryout offshore gas transmission systems, gas leakage control criteria, on bottom, hydrostatic stability and recommend practice for hydrostatic testing
- Explain sour gas service including the additional operation and maintenance consideration
- Employ welding and inspection tests and identify stress corrosion phenomena

### 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 a wide understanding and deeper appreciation of gas transportation piping code in accordance with ASME B31.8 international standard for managers, engineers and other technical and operational staff who are involved in the design, operation, instrumentation, inspection or maintenance of gas transmission and distribution systems.

### 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: -


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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 **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.

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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.

### 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. Marian Copilet, MSc, BSc** is a **Senior Pipeline, Piping & Subsea Umbilicals Engineer** with almost **40 years** of experience and extensive knowledge within the **Oil & Gas, Petrochemical** and **Refinery** industries. His expertise widely covers in the areas of **upstream and downstream sectors**, particularly in **Pipelines, Pipework, Pigging** Foundation, **Pigging of Oil & Gas Line, Pigging Principles, Pigging Procedures, Subsea Umbilicals, Oil & Gas Pipelines, Welding Technology, NDT Inspection**, Upstream and

Downstream Oil & Gas Industries, **Pipeline Design, Pipeline Isolation & Intervention, Piping Systems Specification, Pipeline Repair, Hot-Tapping, In-line Inspection Technologies, Pipeline Pigging, Pipeline Crawlers, Equipment Integrity & Inspection, Pipeline Design & Integrity Engineering, Pipeline Hydraulic Engineering, Pipeline Operation & Maintenance, Pipeline Integrity & Rehabilitation, Pipeline Systems, Pipeline Design & Construction, Pipeline System Design, Pipeline & Piping Installation, Onshore Pipeline Repair Methods & Equipment, Pipelines Defect Identification & Corrosion Risk Assessment, Risk Based Inspection (RBI), Basic Pipeline Engineering, Pipeline Inspection & Integrity Assessment, Pipeline Integrity Management System (PIMS), Facility & Pipeline Integrity Assessment and Pipeline & Piping Codes** including ISO 13628-5, DNV Series (OS-F101, OS-F201, RP-F109), ASME B series (B31.3, B31.4 & B31.8, B31.G, B31.8S), BS 8010 Part 3 and Pressure Vessel Codes (PD 5500, ASME VIII Div. 1& Div. 2). Further, he is also well-versed in Oil & Gas Transportation Pipeline System Reliability, Fundamentals of Pipeline Systems (PL4), Welding Technology, Inspection & Decommissioning, Flange Joint Hydraulic Tensioning & Tightening Control, Inspection of Process Plant Equipment, In-line Inspection Systems Qualification Standards (API 1163), Boiler Operation, Inspection, Maintenance, Safety & Water Treatment Technology, API 579-1, Fitness-for-Service (FFS) of Pressure Vessels, Process Plant Equipment Failure Prevention, Piping & Storage Facilities Maintenance & Repair, Vessel & Tanks Integrity and Rehabilitation, Sales Strategy, Contract Preparation and Bidding, Contract Negotiation, Conflict Resolution, Operational Management, Procurement Management and International Business.

During his career life, Mr. Copilet has gained his practical and field experience through his various significant positions **Pipeline Engineer, Mechanical Engineer, Welding Engineer, Machinery Equipment Engineer, Pipeline Inspector, Proposals Engineer, QA/QC Engineer, Sales Director, Account Development Manager, Technical Solutions Manager, Technical Account Manager, General Sales Manager, Sales Manager** and **University Lecturer** from various companies such as **Oceaneering Umbilical Solutions, Oceaneering International Services, STATS Group, Durham Pipeline Technology (DPT), GD Engineering**, Bucharest Polytechnic University, Vulcan S.A. and Nuclearmontaj (Cernavoda Nuclear Power Station).

Mr. Marian has also worked with major international clients in UK, Europe, Middle East, North Africa and Asia with major international clients including **ADMA-OPCO, Aker Kvaerner, AMEC, Bechtel, BP, British Gas, China Petroleum, Chevron, EnQuest, ExxonMobil, ENPPI, Fluor Daniel, FMC, Foster Wheeler, Framo, Kala, Marathon Oil, National Iranian Gas, PD Oman, Petrojet, Petronas, Qatar Petroleum, QGPC, RasGas, Saudi Aramco, Shell, Single Buoy Moorings, Saipem, Snamprogetti, Sonatrach, Statoil, Subsea 7, TAQA, Technip, Total, Woodside, etc.**

Mr. Copilet has a **Master's and Bachelor's degree with Honors in Mechanical Engineering (Welding, Machinery & Technology)**. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and has further delivered numerous trainings, courses, seminars, conferences and workshops globally.

### 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\$ 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: Monday 09<sup>th</sup> of September 2024**

0730 – 0800	<i>Registration &amp; Coffee</i>
0800 – 0815	<i>Welcome &amp; Introduction</i>
0815 – 0830	<b>PRE-TEST</b>
0830 – 0915	<i>Introduction to ASME codes</i>
0915 – 0930	<i>Break</i>
0930 – 1100	<i>ASME B31.8 Contents</i>
1100 – 1215	<i>Materials, Equipment &amp; Welding</i>
1215 – 1230	<i>Break</i>
1230 – 1330	<i>End Preparation for Buttwelding</i>
1330 – 1420	<i>Piping Systems Fabrication Details</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day One</i>

#### **Day 2: Tuesday 10<sup>th</sup> of September 2024**

0730 – 0830	<i>Supports and Anchorage for Exposed Piping</i>
0830 – 0930	<i>Design, Installation &amp; Testing for Steel Materials</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Control and Limiting of Gas Pressure</i>
1030 – 1100	<i>Design Installation &amp; Testing for Non-Metallic Materials</i>
1100 – 1115	<i>Break</i>
1115 – 1145	<i>Valves, Meters &amp; Regulators</i>
1145 – 1230	<i>Operating Procedures Affecting the Safety of Gas Transmission Systems</i>
1230 – 1420	<i>Class Location Guidelines</i>
1420 – 1430	<b>Recap</b>
1430	<i>Lunch &amp; End of Day Two</i>

**Day 3: Wednesday 11<sup>th</sup> of September 2024**

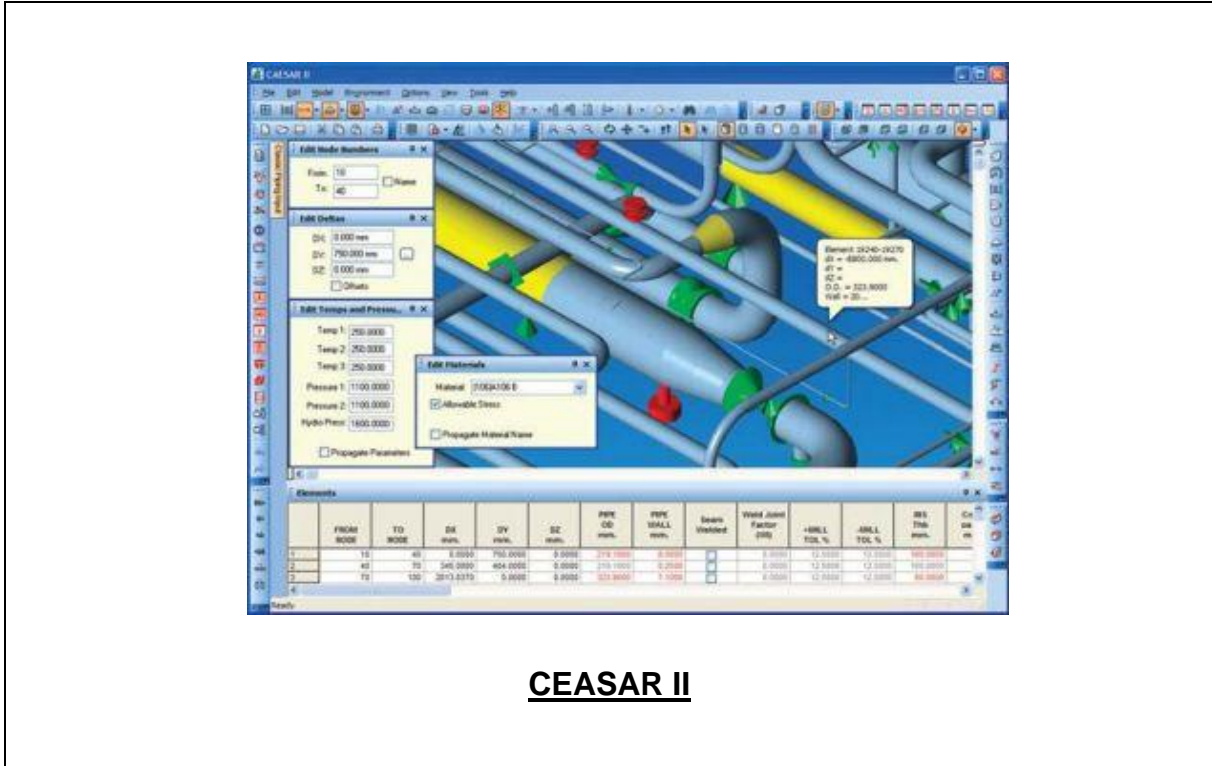
0730 – 0830	<i>Maintenance of Pipelines</i>
0830 – 0930	<i>Distribution Piping Maintenance</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Corrosion Control</i>
1030 – 1100	<i>Criteria for Cathodic Protection</i>
1100 – 1115	<i>Break</i>
1115 – 1145	<i>Determination of Remaining Strength of Corroded Pipe</i>
1145 – 1230	<i>Estimating Strain in Dents</i>
1230 – 1420	<i>Offshore Gas Transmission Systems</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch &amp; End of Day Three</i>

**Day 4: Thursday 12<sup>th</sup> of September 2024**

0730 – 0830	<i>Gas Leakage Control Criteria</i>
0830 – 0930	<i>On Bottom, Hydrostatic Stability</i>
0930 – 0945	<i>Break</i>
0945 – 1015	<i>Recommended Practice for Hydrostatic Testing</i>
1015 – 1045	<i>Recommended Practice for Hydrostatic Testing</i>
1045 – 1100	<i>Break</i>
1100 – 1130	<i>Additional Operating &amp; Maintenance Consideration for Sour Service</i>
1130 – 1200	<i>Welding &amp; Inspection Tests</i>
1200 – 1345	<i>Stress Corrosion Phenomena</i>
1345 – 1400	<i>Course Conclusion</i>
1400 – 1415	<b>POST-TEST</b>
1415 – 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch &amp; 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 the “CAESAR II” simulator.



**CAESAR II**

**Course Coordinator**

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