



An ISO 9001:2015 & ISO 29990:2010
Certified Company

Pipeline Operations and Maintenance

30 Sep - 04 Oct 2018, Muscat
04 - 08 Nov 2018, Muscat
24 - 28 Mar 2019, Dubai



29-MAR-18



United Nations
Global Compact

Pipeline Operations and Maintenance

Why Choose this Training Course?

Pipeline systems for oil and gas industry play important role in modern industrial operations. The purpose of this course is to present basic characteristics of efficient operation of pipelines in various engineering applications

This course will cover the interaction of pipelines with flow moving equipment, i.e. pumps and compressors and technical characteristics of operation of pump and compressor stations

The delegates will be introduced to main points of inspection and testing according to relevant API standards

They will also develop familiarity with methods of cleaning and other maintenance activities, including necessary repairs as prevention of failures.

The programme will include several workshops with real problems from industrial practice which will enable discussions and exchange of experiences.

This course will feature:

- Main aspects of pipeline efficient and safe operation
- Approaches to pipeline flow control and measurements
- Processes of material degradation due to ageing and work load
- Best practices for pipeline cleaning and maintenance
- Inspection procedures and estimating remaining life of equipment

Who is this Training Course for?

- Process, chemical and mechanical engineers working in petrochemical and process industry, including oil refineries and gas production companies where operation and maintenance of pipelines are high importance
- Operation, technical service and maintenance professionals from various processing plants involved in everyday operation, control, inspection and maintenance of pipelines
- Engineers and consultants dealing with planning of new production lines and retrofitting plants and introducing new technologies
- Technical professionals responsible for maintenance and repair of equipment

How will this Training Course be Presented?

The course will be conducted along workshop principles with formal lectures and interactive worked examples included in several workshops. The emphasis in the course will be on the explanation of all technical phenomena and providing answers to problems that are encountered in everyday industrial practice related to installation, operation and maintenance, as well as repair and alterations of pipeline systems.

Each learning point will be reinforced with practical examples. There will be ample opportunities for active discussion and sharing professional experiences and exchange that will help solidify the gained knowledge.



Course Schedule:

30 Sep - 04 Oct 2018, **Muscat**

04 - 08 Nov 2018, **Muscat**

24 - 28 Mar 2019, **Dubai**

What are the Goals?

By the end of this course, delegates will be able to:

- Identify basic principles of safe operation & efficient maintenance of pipelines for various industrial applications
- Develop deep understanding & familiarity with the practical aspects of operation and maintenance activities
- Illustrate the concepts discussed and be provided with necessary experience in applying them
- Use & follow the guidelines & best industrial practices related to operation, control, inspection & testing of pipelines

THE COURSE CONTENT

MODULE ONE:

Overview of Technical Characteristics of Pipelines

- Overview of main elements of oil and gas pipeline systems
- Selection & sizing of pipelines: flow rate, MAWP, pumping power: ASME B31.3
- Selection of pipeline material and interaction with working fluid
- Operation of pump and compressor stations
- Pipeline flow control and measurements: custody transfer
- Workshop: Examples and solutions

MODULE TWO:

Operation & Material Degradation

- Pipeline material ageing: erosion, corrosion & stress corrosion cracking
- Corrosion Direct Assessment: External (ECDA) and internal (ICDA) Methods
- Cathodic protection, coating and other technologies: outer & inner surface
- Metal loss inline inspection (ILI) and smart pigging (NDT) monitoring
- Pipeline fatigue, cracks, seam defects and ruptures
- Workshop: Examples and solutions

MODULE THREE:

Operation & Safety Management

- Safety Instrumentation, Control Valves and Other Safety Accessories
- Transient operation and effects and water hammer
- Pipeline failure prevention & root cause analysis
- Leak detection methods (LDAR) and patrolling & surveillance: SCADA
- Inspection (RBI), Hydrostatic test methodology
- Workshop: Examples and Solutions

MODULE FOUR:

Maintenance Technologies

- Pipeline maintenance & cleaning technologies: pipeline reconditioning
- Monitoring of pipeline vibrations and support integrity
- Repair technologies: welding of composite sleeves and segment replacements
- Maintenance of valves, fittings and accessories
- Valve repair: hot tapping, temporary plugging (stopple)
- Workshop: Examples and solutions

MODULE FIVE:

Testing & Monitoring in Operation

- Hydrostatic testing: allowable operating pressure and hydrostatic test pressure
- Reliability and availability of pipelines in operation
- Risk based inspection (RBI)
- Fitness for Service (FFS)
- Estimate of remaining life of equipment
- Course summary and review

The Certificate

AZTech Certificate of Completion for delegates who attend and complete the training course.

Pipeline Operations and Maintenance

Complete & send by fax/mail to address given below. Please use BLOCK CAPITALS.

This fee is inclusive of Documentation, Lunch and Refreshments

Date	Venue	Fees(USD)	Book your seat
30 Sep - 04 Oct 2018	Muscat	\$4,950	Register Now
04 - 08 Nov 2018	Muscat	\$4,950	Register Now
24 - 28 Mar 2019	Dubai	\$5,950	Register Now

VAT Announcement: The Government of UAE have introduced Value Added Tax (VAT) on goods and services from 01-January-2018. In compliance with the legislation issued by the UAE Government, we will be applying a 5% VAT on the fees for all our programs and services offered from January 2018 as applicable and stipulated in the FTA circulars.

REGISTRATION DETAILS

Family Name: _____ First Name: _____

Position: _____ Company: _____

Mailing Address: _____

Telephone: _____ Mobile: _____ Fax: _____ Email: _____

AUTHORISATION

Authorised by: _____ Position: _____

Telephone: _____ Fax: _____ Email: _____

Postal Address: _____

MODE OF PAYMENT

- Please invoice my company Please invoice me Please find enclosed a cheque payable to AZTECH

HOTEL ACCOMMODATION

Hotel accommodation is not included in the Registration Fee. A reduced corporate rate and a limited number of rooms are available for attendees wishing to stay at the hotel venue. Please make your request for accommodation at least **3 weeks prior** to the commencement of the course.

EVENT DISCLAIMER

We reserve the right to cancel or postpone a seminar or related event, change venue, substitution of the Instructor at our sole discretion. If this occurs, our responsibility is limited to a refund of any registration fee(s) already paid. We are not responsible for airline tickets, hotels costs, other tickets or payments, or any similar fee penalties or related or unrelated losses, costs and/or expenses registrant may incur or have incurred as a result of any trip cancellations or changes.

DOWNLOAD TRAINING PLAN 2018



Scan this code with your smart phone to download Training Plan 2018

Our training portfolio will provide you a number of seminars and courses to choose from depending on your organisational goals and personal development objectives.

CANCELLATIONS & SUBSTITUTIONS

You must notify the Registrar of cancellations at least 2 weeks before a scheduled seminar in order to be eligible for a credit. If you cannot attend, you may send a replacement from your organisation at no charge. There is a \$250 handling charge for all cancellations or rescheduling. We reserve the right to cancel a seminar due to low enrollment. All registrants will be notified in advance and a full refund will be provided upon request.

4 WAYS TO REGISTER

Toll Free: 800-AZTECH
Telephone: +971 4 427 5400
Fax Number: +971 4 427 5401
Email Address: info@aztechtraining.com
Visit our website: www.aztechtraining.com

CERTIFICATION

AZTech Certificate of Completion for delegates who attend and complete the training course

