An Intensive 5 Day Training Course

Offshore Structure Design, Construction & Maintenance

10 - 14 Sep 2017, Abu Dhabi

This course is Designed, Developed, and will be Delivered under ISO Quality Standards
WHY CHOOSE THIS TRAINING COURSE?

This Offshore Structure Design, Construction & Maintenance training course will review the fundamentals behind all types of fixed offshore structures and, in the case of fixed platforms, will cover applications of these principles. The overall objective is to provide participants with an understanding of the design, construction and risk based maintenance for offshore platforms, specifically, the theory and process of such design and the use of current applicable engineering methods in the design of fixed offshore platforms.

This training course will feature:

- Case studies on petroleum industry
- Codes and standards with technical practice
- The new trend of integrity management system
- The engineering and pitfalls in construction
- The pushover structure analysis technique
- ROV under water inspection and CP system design

WHO IS THIS TRAINING COURSE FOR?

This PetroKnowledge training course is suitable to a wide range of professional structural engineers who are interested in learning about offshore structure design, construction and maintenance:

- Design structural engineers
- Supervision engineer
- Planners
- Steel fabricator
- Construction engineers
- Project engineers

WHAT ARE THE GOALS?

At the end of this training course, participants will be familiar with:

- Offshore steel structure design overview
- Offshore structure platform
- The loads applied on offshore structure platform
- The modern technique on the risk based inspection for maintenance plan for fleet platforms
- The steps of fabrication and construction and the ways to control these steps
- The assessment of the existing offshore structure platform
- Design of CP system

HOW WILL THIS TRAINING COURSE BE PRESENTED?

This training course will utilise a variety of proven adult learning techniques to ensure maximum understanding, comprehension and retention of the information presented. The daily workshops will be highly interactive and participative. The illustration will depend on videos and photos.

In addition to the traditional lecture delivery, the course delivery emphasizes the use of group discussions and actual design problems in order to ensure participants can put the newly learned concepts to use.
DAILY AGENDA

Day One: Introduction

Competency Description: As an engineer, you need to know the main element of offshore steel structure design.

Key behaviours:

- Understand the steps of design for steel structure
- Understand the different steel structure system
- Understand the codes and standards

Topics to be covered:

- Introduction
- Principal of project management for fixed offshore structure platform
- Different types of fixed offshore structure
- Loads effects on Fixed offshore structure
- Design Parameters Specifications
- Applied load by ISO19002 and APIRP2A

Day Two: Steel Member Design

Competency Description: As an engineer, you need to know the design of the main element of the steel structure.

Key behaviours:

- Understand the geotechnical investigation offshore
- Understand the offshore steel structure system
- Understand the loads affect the platform

Topics to be covered:

- General Design Considerations
- Basics design of fixed offshore platforms
- Offshore Site Investigation
- Wave Theories, Spectral Analysis Application
- Wind and Wave Forces, Computational Hydrodynamics
- Buoyancy and Stability
- Geotechnical Engineering for offshore structure
Day Three: Connection Design

Competency Description: As an offshore structural engineer, you need to know the ways of design and constructing the pile.

Key behaviours:

- Understand the pile design
- Understand the geotechnical investigation
- Understand the overview the differences between the different softwares

Topics to be covered:

- Offshore Piles design philosophy
- Basics of Earthquake and Seismic Analysis with API approach
- Fundamental Concepts and Case Studies for Laterally Loaded Piles
- Design of Pile Foundations for Axial Loading
- Concept of design steps by computer software as (SACS, SESAM, etc)

Day Four: Steel Construction and Maintenance

Competency Description: As a structural engineer, you need to know the ways of constructing the jacket and topside.

Key behaviours:

- Understand the construction steps
- Understand the ways of QC for steel structure
- Understand the design of lifting, pull out and launching.

Topics to be covered:

- Pushover analysis
- Pipeline subsea installation
- Design of Tubular Members
- Welding & Fatigue
- Topsides and jacket design
- Different types of jacket
- Basic concepts of dynamic analysis
- Soil Dynamics & Mudslides
- Platform construction (Case study)

Day Five: Offshore Structure Integrity

Competency Description: As an engineer, you need to know the integrity management system for offshore structure.

Key behaviours:

- Understand the ways of repair
- Understand the approach of RBI
- Understand the overview about the sustainable structure

Topics to be covered:

- Structural Reliability
- Load Out Transportation & Installation
- Structure integrity principal
  - Cathodic protection design and anode retrofit
- Risk based maintenance and ROV inspection technique
Offshore Structure Design, Construction & Maintenance

COURSE DATES, VENUES AND FEES

<table>
<thead>
<tr>
<th>Date</th>
<th>Venue</th>
<th>Fee</th>
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<tbody>
<tr>
<td>10 - 14 Sep 2017</td>
<td>Abu Dhabi</td>
<td>$4,500</td>
</tr>
</tbody>
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This fee is inclusive of Documentation, Lunch and Refreshments

Please use BLOCK CAPITALS to fill in this form. It is important that you read carefully through all information before starting to complete the form.

REGISTRATION DETAILS

Family Name: ____________________________________________  First Name (Mr./Ms.): ____________________________
Position: ________________________________________________  Company: __________________________________________
Mailing Address: ______________________________________________________________________________________
Telephone: ____________________________  Mobile: ____________________________  Fax: ____________________________  Email: ____________________________

AUTHORISATION

Authorisation By: __________________________________________
Position: ________________________________________________  Company: __________________________________________
Mailing Address: ______________________________________________________________________________________
Telephone: ____________________________  Mobile: ____________________________  Fax: ____________________________  Email: ____________________________

IN-HOUSE TRAINING

Maximize your training budget and have several members of your staff, who require specific training, to attend with the advantage of not incurring additional travel costs when attending a ‘public’ training courses & seminars.

Would you like a PetroKnowledge training course delivered at a time or location to suit you? Would you like PetroKnowledge to tailor a course from our comprehensive library of programmes? Or would you like us to create an entirely new, bespoke course to suit the exact needs of your organisation?

Working in partnership with our clients, PetroKnowledge provides an enjoyable, creative learning experience that enables participants to develop their skills and knowledge. We can deliver not only generic, off-the-shelf courses from our extensive learning portfolio, but we can provide tailored as well as bespoke learning on any aspect of skill development or knowledge. Our in-house courses are conducted by the same expert trainers who conduct PetroKnowledge public courses so you can be assured they will fulfill the learning objective of any organisation.
BOOKING TERMS & CONDITIONS

Booking

• Bookings for courses can be made via our website (petroknowledge.com) or by contacting our Registration Desk on +971 2 5577 389 or at reg@petroknowledge.com
• For on-line bookings, please select the course that you require and click on the “Register Now” button, following the instructions step by step
• Upon receipt of booking in order, enrollment on the respective training course will be confirmed by Registration Team with all necessary documentation

Invoicing and Payment

• Our fees include course presentation, relevant materials, physical & digital documentation, lunch and refreshments served during entire training. Accommodation charges are not included in the course fees
• Course fees are payable upon booking unless a valid, authorized Purchase Order is provided and accepted
• Invoices will be sent via email/courier to the ID/name and address provided
• We prefer to have the fees payment in our account before the start of training course. However, if your company has a different payment policy, the same should inform us in advance
• The currency of fees is in US Dollars (USD). Payments can be made in USD or UAE local currency AED (Arab Emirates Dirhams) either by Bank Transfer or by Credit Card. Our Bank Account details will be provided on the Invoice
• Please note that we do accept payment by cash, in USD or AED, only for the last minute bookings

Cancellation of Courses

• It may be necessary for PetroKnowledge to amend or cancel any course, course times, instructors, dates or published fees due to unforeseen circumstances and we reserve the right for such changes
• Any amendments will be advised before the course start date and any bookings already paid in full will not be subject to increased fees

Cancellation by Client

• Once you have completed your booking, received your confirmation of enrollment and a dated payment Invoice, you are deemed to have a contract with PetroKnowledge. You reserve the right to cancel this contract given the below terms
• All cancellations must be received in writing at reg@petroknowledge.com and info@petroknowledge.com at least 14 days prior to the training
• After the cancellation period has expired, consideration may be given, on a case to case basis, if a registered delegate nominates a substitute on the same course, shifts to next session of the course or moves to a new course
• For a cancellation request made on or before the statutory 14 day cancellation period, a refund may be given or a credit note issued which can be used against future course fees
• A 25% administration fee (of the total course fee at the time of booking) will be charged for any cancellations made outside of the statutory cancellation period

Attendance Certificate

• The daily course schedule should be accurately followed to ensure undeterred implementation of our training
• All delegates, who participated in their course throughout, will receive the Certificate of Completion on the last day
• Please report any foreseeable absences to a PetroKnowledge representative or to your sponsors directly
• An absence of three (3) or more sessions of the course will invalidate your eligibility for the Certificate of Completion