

DAY 1

Offshore Pipeline Design

- Offshore pipeline route selection
- Hydrodynamics around Pipes
- Expansion, Axial Creeping, Upheaval/Lateral Buckling
- On-bottom Stability
- Vortex-induced Vibrations (VIV) and Fatigue
- Corrosion Prevention
- Flow Assurance
- Hydrates
- Wax and Asphaltenes

DAY 2

Offshore Pipeline Installation, Inspection and Integrity Management

- Offshore pipeline installation methods
- Spiral Welded Pipes for Shallow Offshore Applications
- The effect of installation on offshore pipeline integrity
- Offshore Pipeline inspection, maintenance and repair
- Pipeline oil spill cleanup
- Offshore pipeline risk, corrosion and integrity management

DAY 3

Integrity and Maintenance of Offshore Pipelines

- Integrity Management of Flexible Pipes
- Leak Detection Systems
- Risk Analysis for Subsea Pipelines
- Risk-Based Inspection
- Quantitative Risk Analysis
- Based RBI
- Consequences of Failure for Modeling for Oil and Gas Spills
- Environmental Impact Assessment

DAY 4

Umbilical, Risers, Flowlines (Surf)

- Offshore Umbilical's, Risers + Flowlines (SURF)
- Offshore Umbilical Systems
- Design of Deepwater Risers
- Design codes
- VIV and Wave Fatigue of Risers
- Flexible Risers and Flowlines
- Hybrid Risers
- Drilling Risers

DAY 5

Offshore Facility Interface

- Introduction to FPSO and FLNG facilities
- Interface Onboard FPSO or FLNG Facility
- FPSO and FLNG topside facilities and layout
- FPSO and FLNG operation, inspection and maintenance
- Regulations and Codes
- Environmental influences affecting FPSO – FLNG Operations
- FPSO and or FLNG Mooring system, Turret and Swivel
- Oil or Gas Transfer (Offloading) in FPSO and FLNG