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COURSE BROCHURE

FPSO and Subsea Facility Integrity Management Training Course

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Registered in the United Kingdom and Saudi Arabia

FPSO and Subsea Facility Integrity Management Training Course

FPSO and Subsea Facility Integrity Management is a 1-week training course for integrity engineers and asset managers that produces an FPSO and subsea integrity plan covering inspection priorities, open anomalies and life extension actions for one floating installation. Many floating production units and subsea tiebacks now run beyond their original field life, while access windows offshore remain short and costly. Jupiter Prime Training delivers this FPSO and Subsea Facility Integrity Management course.

Why FPSO and Subsea Facility Integrity Management Matters Now

Three pressures shape floating and subsea integrity work today. Field owners want extra production years from ageing hulls, moorings, risers and flowlines, which raises fatigue and corrosion concerns. Offshore inspection relies on limited bed space, diving or remotely operated vehicle campaigns and weather windows, so every survey must be targeted. Partners and insurers expect clear evidence that anomalies are tracked and closed. Operators that join hull, topsides and subsea data in one integrity picture plan campaigns well; those that keep separate records face surprises during shutdowns. The course draws on ISO 55001 asset management and EN 13306 maintenance terminology.

Who Gains Most from FPSO and Subsea Facility Integrity Management

- Integrity engineers responsible for hull, tank and topsides inspection schemes
- Subsea engineers who manage riser, flowline and umbilical condition
- Asset managers who weigh life extension against decommissioning options
- Corrosion engineers who run cathodic protection and chemical treatment routines for offshore systems
- Inspection planners who schedule diving, remotely operated vehicle and rope access campaigns

Offshore integrity groups from one operator gain most when hull, topsides and subsea members attend together and agree one anomaly register.

FPSO and Subsea Facility Integrity Management Capabilities

Participants learn to see a floating installation and its subsea network as one integrity system and to spend scarce offshore access where risk is highest.

- Assess hull, mooring and riser threats with risk-based inspection — offshore campaign planners
- Calculate corrosion and fatigue allowances for ageing floating structures — life extension decisions
- Design an anomaly classification and response scheme — operations and integrity leads
- Specify inspection scopes for diving and remotely operated vehicle campaigns — subsea contractors
- Weigh repair, mitigation and monitoring options for degraded subsea equipment — asset owners
- Build integrity data links between topsides, hull and subsea records — reporting to partners

Key FPSO and Subsea Facility Integrity Management Terms

- FPSO — a floating production, storage and offloading unit that processes and stores hydrocarbons offshore before export by tanker.
- Risk-based inspection — setting inspection type and frequency from the likelihood and consequence of each failure threat.
- Anomaly — any observed condition outside design or operating limits that needs assessment and a recorded response.
- Life extension — the assessment and work needed to operate a facility safely beyond its original design life.
- Riser — the pipe or flexible line that carries fluids between the seabed and the floating unit.
- Cathodic protection — an electrochemical method using anodes or impressed current to slow corrosion of submerged steel.

FPSO and Subsea Facility Integrity Management Day by Day

Day 1: Floating and Subsea Integrity Landscape

- FPSO Hull, Turret and Topsides Systems — Mapping Integrity Boundaries
- Subsea Trees, Manifolds, Flowlines and Umbilicals — Threat Overview
- ISO 55001 Asset Objectives Offshore — Linking Integrity to Production Targets
- Oil FPSO and Gas Tieback Case Histories — Lessons From Failures
- Integrity Roles Between Operator, Class and Contractors — Clarifying Accountability

Day 2: Risk-Based Inspection Offshore

- Threat Identification for Hull and Moorings — Corrosion, Fatigue and Wear
- Riser and Flowline Damage Mechanisms — Internal and External Threats
- Likelihood and Consequence Ranking — Setting Inspection Intervals
- Inspection Methods Offshore — Diving, Remotely Operated Vehicles and Rope Access
- Campaign Scoping and Bed Space Planning — Using Scarce Offshore Access

Day 3: Corrosion and Fatigue Management

- Cargo and Ballast Tank Coatings — Inspection and Repair Choices
- Cathodic Protection Surveys — Anode Depletion and Retrofit Decisions
- Internal Corrosion Monitoring and Chemical Injection — Protecting Subsea Lines
- Fatigue Assessment of Mooring Chains and Riser Joints — Remaining Life Estimates
- Integrity Operating Limits for Subsea Systems — Controlling Damage Rates

Day 4: Anomalies, Data and Life Extension

- Anomaly Classification and Response Times — Prioritising Offshore Repairs
- Integrity Data Systems Across Hull, Topsides and Subsea — Single Source of Truth
- Repair, Clamp and Bypass Options — Restoring Subsea Containment
- Life Extension Assessment Steps — Evidence for Extra Field Years
- Decommissioning Readiness Indicators — When Extension No Longer Pays

Day 5: Practising the FPSO and Subsea Integrity Plan

- Risk Ranking of a Case FPSO and Tieback — Applying Inspection Methods
- Corrosion and Fatigue Results Review — Applying Remaining Life Estimates
- Anomaly Register Build — Applying Classification Rules
- Offshore Campaign Schedule — Sequencing Inspection and Repair Work
- FPSO and Subsea Integrity Plan — Completing the Installation Record

Applying FPSO and Subsea Facility Integrity Management After the Course

- Rank the top ten hull, mooring and riser threats on one floating unit and compare them with current inspection intervals.
- Review all open subsea anomalies against the classification and response times taught.

FPSO and Subsea Facility Integrity Management Questions FAQ

What is FPSO and Subsea Facility Integrity Management and why does it matter now?

It is the discipline of keeping floating production units and their subsea networks fit for service through targeted inspection, corrosion control and anomaly management. It matters now because many units are being pushed beyond original field life.

Which roles gain most from FPSO and Subsea Facility Integrity Management training?

Integrity engineers and asset managers gain most. Subsea, corrosion and inspection planning engineers also benefit.

How does FPSO and Subsea Facility Integrity Management differ from an onshore asset integrity course?

It addresses hulls, moorings, risers and subsea equipment that sit in seawater and can only be reached through costly offshore campaigns, which onshore plant courses do not cover.

What do you bring back from FPSO and Subsea Facility Integrity Management training?

You bring back an integrity plan for one floating installation. It ranks threats, lists open anomalies and sets inspection and life extension actions.

FPSO and Subsea Facility Integrity Management: The Way Forward

The FPSO and subsea integrity plan first informs the scope of the next offshore inspection campaign. Integrity engineers maintain it, asset managers use it in life extension discussions and planners book vessels and divers from it. After the first campaign, revisit threat rankings with fresh findings to confirm where risk truly sits.