JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Offshore Drilling Unit Selection and Station Keeping Training Course

26 – 30 September 2027
Doha

jupiterprime.uk

info@jupiterprime.uk

Registered in the United Kingdom and Saudi Arabia

Offshore Drilling Unit Selection and Station Keeping Training Course

Ref: 2835_108777 **Date:** 26 – 30 September 2027 **Location:** Doha **Fees:** 6500 GBP

Offshore Drilling Unit Selection and Station Keeping is a 1-week training course for offshore drilling personnel and engineers who prepare an offshore rig selection and operations checklist for a well campaign. Deeper water, tighter rig markets and higher spread costs make the choice of unit and its station keeping method a decision that shapes well cost, uptime and crew exposure. Jupiter Prime Training places this choice within offshore campaign planning.

Why Offshore Drilling Unit Selection and Station Keeping Matters Now

Three pressures shape unit choice today. Operators are drilling in deeper water and harsher weather windows, which pushes campaigns from bottom-founded units toward moored or dynamically positioned floaters. Rig contractors run mixed fleets of older and newer units with very different motion and deck load limits. Partners and insurers expect a clear account of how a unit will hold position and handle a drift-off. A well-chosen unit keeps a campaign on schedule; a poor match brings waiting on weather, equipment upgrades and higher risk to people and the well.

Who Gains Most from Offshore Drilling Unit Selection and Station Keeping

- Engineers who define well and site requirements for a rig tender
- Supervisors responsible for rig moves, preloading, mooring and positioning on location
- Specialists who plan riser running and disconnect sequences
- Safety leads who assess marine hazards such as punch-through, drift-off and collision
- Contract staff who compare unit capabilities and specifications from rig contractors

A drilling department preparing a new offshore campaign gains most when its engineers and marine specialists attend together.

Offshore Drilling Unit Selection and Station Keeping Capabilities

Participants match unit types, positioning systems and subsea equipment to water depth, metocean conditions and well design.

- Assess jack-up, semi-submersible and drillship options — the rig tender shortlist
- Calculate leg penetration and preload margins — rig move approval
- Compare spread mooring and dynamic positioning for a given water depth — station keeping choice
- Specify watch circles and emergency disconnect limits for a floating unit — well safety on location
- Test subsea stack readiness with function and pressure test plans — acceptance before spud
- Weigh marine drilling hazards in a structured hazard register — campaign risk sign-off

Key Offshore Drilling Unit Selection and Station Keeping Terms

- Jack-Up — a bottom-supported unit that lowers its legs to the seabed and lifts its hull clear of waves.
- Semi-Submersible — a floating unit on pontoons and columns with low motion in rough seas.
- Drillship — a ship-shaped floating unit with a moonpool and high deck load for deep water.
- Dynamic Positioning — thruster control that holds a floating unit over the well without anchors.
- Watch Circle — the allowed offset around the wellhead before alerts and disconnect actions begin.
- Punch-Through — sudden leg penetration when a jack-up breaks through a strong soil layer into weaker soil below.

Offshore Drilling Unit Selection and Station Keeping Day by Day

Day 1: The Offshore Unit Fleet and Campaign Context

- Unit Type Families — Bottom-Supported Versus Floating Drilling Units
- Water Depth And Metocean Envelopes — Limits For Each Unit Type
- Rig Market And Fleet Age — Availability And Upgrade Trade-Offs
- Well Design Drivers — Deck Load, Variable Load And Tubular Storage
- Rig Tender Technical Requirements — Turning Well Needs Into Specifications

Day 2: Jack-Up Siting and Rig Moves

- Site Survey And Geotechnical Data — Seabed Hazards And Soil Profiles
- Leg Penetration And Preload Procedures — Avoiding Punch-Through On Location
- Air Gap And Storm Survival Checks — Elevated Operating Limits
- Rig Move Planning And Towing — Weather Windows And Move Approval
- Proximity Work Near Platforms — Cantilever Reach And Collision Risk

Day 3: Floating Units and Station Keeping

- Spread Mooring Pattern Design — Anchor Holding And Line Tension Limits
- Dynamic Positioning Redundancy Classes — Thruster And Power Failure Cases
- Watch Circles And Offset Limits — Yellow And Red Alert Actions
- Heave Compensation And Motion Response — Operability In Rough Seas
- Drift-Off And Drive-Off Scenarios — Emergency Disconnect Decisions

Day 4: Risers, Subsea Stacks and Marine Hazards

- Marine Riser Running And Tensioning — Weak Point And Recoil Checks
- Subsea Blowout Preventer Stack Layout — Ram And Annular Configuration
- Function And Pressure Test Plans — Stack Acceptance Before Spud
- Shallow Gas And Seabed Hazards — Pilot Hole And Riserless Drilling
- Marine Hazard Register — Collision, Dropped Objects And Severe Weather

Day 5: Practising the Offshore Rig Selection and Operations Checklist

- Unit Shortlist Scoring — Applying Metocean And Well Design Limits
- Station Keeping Choice Case — Applying Mooring And Positioning Methods
- Subsea Readiness Review — Applying Stack Test And Riser Checks
- Hazard Register Walk-Through — Agreeing Controls With Marine And Drilling Leads
- Offshore Rig Selection And Operations Checklist — Completing The Campaign Checklist

Applying Offshore Drilling Unit Selection and Station Keeping After the Course

- Score the next rig tender with the unit shortlist method.
- Lead a watch circle and disconnect drill review with a floating unit crew.

Offshore Drilling Unit Selection and Station Keeping Questions FAQ

What is Offshore Drilling Unit Selection and Station Keeping and why does it matter now?

It is the practice of choosing a jack-up, semi-submersible or drillship and the method that holds it over the well. It matters now because deeper water makes a poor match costly.

Which roles gain most from Offshore Drilling Unit Selection and Station Keeping?

Well engineers, rig supervisors, subsea specialists and marine safety leads gain most. Each sees how unit limits and positioning affect their part of a campaign.

How does Offshore Drilling Unit Selection and Station Keeping differ from a drilling engineering course?

It focuses on the unit and its marine behaviour rather than well trajectory or mud design. Drilling engineering courses plan the hole; this course plans the platform that drills it.

What do you bring back from Offshore Drilling Unit Selection and Station Keeping?

You bring back a campaign checklist built during the course. It covers unit shortlisting, siting or mooring, positioning limits, subsea readiness and marine hazards.

Offshore Drilling Unit Selection and Station Keeping: The Way Forward

The offshore rig selection and operations checklist first informs the shortlist for the next rig tender. Well engineers and contract staff use it to compare offers and prepare the move. After the first well, revisit the watch circle limits and hazard register, since actual weather and seabed conditions show where the assumptions need tightening.