JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Lift Planning, Rigging and Load Handling on Oil and Gas Sites Training Course

19 – 23 July 2027
New York

Lift Planning, Rigging and Load Handling on Oil and Gas Sites Training Course

Ref: 2757_105426 **Date:** 19 – 23 July 2027 **Location:** New York **Fees:** 9500 GBP

Lift Planning, Rigging and Load Handling on Oil and Gas Sites is a 1-week training course for lifting supervisors, rigging leads, deck foremen and maintenance planners who authorise or run lifts, and each participant builds a site lift plan pack for a real installation. Dropped objects and crane incidents remain a leading source of serious harm on plants and platforms. Jupiter Prime Training delivers this course on lift planning and rigging.

Why Lift Planning and Rigging Matters Now

Three forces shape lift planning and rigging today. Ageing plants and platforms need more maintenance lifts in congested modules, often over live hydrocarbon equipment. Contractor crews rotate quickly, so riggers, banksmen and crane operators who have never worked together must share one lift sequence. Asset owners also expect clear evidence that every lift was categorised, planned and checked before the hook moved. A site that handles this well keeps loads, people and process equipment apart; one that handles it badly risks dropped loads, damaged pipework and production stoppages.

Who Gains Most from Lift Planning and Rigging

- People who prepare and sign lift plans for routine, complex and critical lifts on process sites
- People who select slings, shackles, spreader bars and other below-the-hook gear for each load
- People who supervise crane, hoist and chain block work on decks, pipe racks and turnaround areas
- People who schedule maintenance and shutdown work that depends on lifting equipment and crews
- People who inspect lifting accessories and keep the register of certified gear up to date

Maintenance and operations crews from the same platform or plant gain most when supervisors, riggers and planners attend together and agree one lift planning routine.

Lift Planning and Rigging Capabilities

Participants leave able to turn a load, a crane and a congested worksite into a lift sequence that every crew member can follow.

- Categorise a lift by load, environment and consequence of failure — the level of planning and authorisation each lift needs
- Calculate gross load, centre of gravity and sling tensions at given angles — the choice of rigging arrangement
- Specify slings, shackles, hooks and spreader bars against working load limits — safe rigging selection for each load
- Assess crane duty charts, radius, ground bearing and deck limits — whether the chosen crane can make the lift
- Design a lift sequence with exclusion zones, tag lines and signalling roles — clear duties for the lifting crew
- Apply weather, motion and vessel transfer limits to offshore lifts — the go or no-go call on the day

Key Lift Planning and Rigging Terms

- Working load limit — the maximum mass a lifting accessory is certified to carry in a stated configuration.
- Centre of gravity — the point where a load's mass acts; the hook must sit above it for a level, stable lift.
- Sling angle factor — the increase in leg tension as sling legs spread away from vertical.
- Lift categorisation — sorting lifts into routine, complex or critical to set the depth of planning and sign-off.
- Dynamic amplification — the extra load on crane and rigging caused by vessel motion, snatch or sudden stops.
- Exclusion zone — the marked area below and around a suspended load that no person may enter during the lift.

Lift Planning and Rigging Day by Day

Day 1: Lifting Hazards on Plants and Platforms

- Dropped Object Records — Patterns Behind Incidents on Decks and Pipe Racks
- Lifting Roles and Responsibilities — Who Plans, Authorises and Directs a Lift
- Lift Categorisation Matrix — Routine, Complex or Critical Planning Depth
- Lifting Equipment Register — Certification Status Before Gear Leaves the Store
- Simultaneous Operations Map — Lifts Over Live Process Equipment

Day 2: Load Calculation and Rigging Selection

- Gross Load Estimate — Load, Rigging and Hook Block Mass Together
- Centre of Gravity Location — Hook Position for Irregular Packages
- Sling Tension Calculation — Leg Loads at Different Sling Angles
- Sling, Shackle and Hook Selection — Matching Working Load Limits to Duty
- Spreader Bars and Lifting Beams — Protecting Long or Fragile Loads

Day 3: Cranes, Hoists and Ground Conditions

- Crane Duty Chart Reading — Capacity at Radius and Boom Length
- Ground Bearing and Outrigger Mats — Onshore Crane Setup Limits
- Pedestal Crane Limits — Offshore Deck Loads and Laydown Areas
- Chain Blocks, Lever Hoists and Beam Clamps — Lifts Inside Modules
- Pre-Use Inspection Checklists — Rejecting Damaged Gear Before the Lift

Day 4: Offshore Transfers and Lift Execution

- Vessel to Platform Transfers — Sea State and Motion Limits
- Dynamic Amplification Allowance — Extra Load From Snatch and Swell
- Wind Speed and Visibility Limits — Stopping Rules for the Lift
- Signalling and Radio Protocols — Banksman, Operator and Rigger Coordination
- Toolbox Talk and Exclusion Zones — Crew Briefing Before the Hook Moves

Day 5: Building the Site Lift Plan Pack

- Lift Categorisation Applied — Sorting a Real Maintenance Lift List
- Load and Rigging Calculation Sheet — Completed for a Chosen Package
- Crane Selection Record — Duty Chart Check and Ground or Deck Limits
- Lift Sequence Drawing — Positions, Tag Lines and Exclusion Zones
- Site Lift Plan Pack — Sign-Off Route and Post-Lift Feedback Log

Applying Lift Planning and Rigging After the Course

- Re-categorise the next month's maintenance lift list on one installation and route each critical lift for full planning and sign-off.
- Run a rigging gear audit in one store, checking working load limit markings and certification against the lifting equipment register.

Lift Planning and Rigging Questions FAQ

What is lift planning and rigging on oil and gas sites and why does it matter now?

Lift planning and rigging is the work of preparing, rigging and directing lifts so loads move without harm. It matters now because ageing installations need more lifts in tight spaces with rotating contractor crews.

Which roles gain most from lift planning and rigging training on oil and gas sites?

Lifting supervisors, rigging leads, deck foremen and maintenance planners gain most. They prepare lift plans, choose rigging gear and direct crews, so better methods reduce dropped loads and stoppages on their sites.

How does lift planning and rigging differ from a heavy lift engineering course?

Lift planning and rigging focuses on everyday and complex site lifts run by supervisors. A heavy lift engineering course covers large module moves and specialist transport, while a crane upkeep course covers machine inspection and repair.

What will I bring back from lift planning and rigging training for oil and gas sites?

You bring back a site lift plan pack for a real lift on your own installation. It holds the categorisation, load and sling calculations, crane check, lift sequence drawing and sign-off route.

Lift Planning and Rigging: The Way Forward

The site lift plan pack first informs which lifts on the coming maintenance list need full critical-lift sign-off. Lifting supervisors, riggers and planners use it at the toolbox talk and the permit desk. After its first use, revisit the post-lift feedback log to see where rigging choices or weather limits needed changing.