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COURSE BROCHURE

# Oil and Gas Professionals Advanced Skills Training Course

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Registered in the United Kingdom and Saudi Arabia

# Oil and Gas Professionals Advanced Skills Training Course

Oil and Gas Professionals Advanced Skills is a 2-week training course for engineers, supervisors and team leaders taking on wider asset responsibilities, and it closes with each participant's personal operations improvement plan. Tighter margins, ageing facilities and a shifting workforce mean organisations need people who connect wellsite, plant and terminal decisions to barrels, cost and safe production. Jupiter Prime Training offers Oil and Gas Professionals Advanced Skills to multidisciplinary cohorts.

## Why Oil and Gas Professionals Skills Matter Now

Three forces reshape the oil and gas workplace: volatile crude and gas prices that squeeze lifting and processing costs, the energy transition that pushes operators to cut flaring and methane, and the retirement of experienced field staff. An asset whose engineers read only their own discipline loses deferred production, repeats incidents and overpays contractors. One that develops broad professionals protects uptime and reputation. The course draws on the Petroleum Resources Management System PRMS for reserves language, process safety barrier thinking and the industry standards published by the American Petroleum Institute API.

## Who Gains Most from Oil and Gas Professionals Skills

- Production and facilities engineers responsible for daily output, deferment and equipment availability
- Shift supervisors accountable for permit to work, handovers and crew safety on site
- Maintenance and integrity leads who balance inspection backlogs against production targets
- Planning and scheduling coordinators who sequence shutdowns, wells and logistics
- Contract holders who direct drilling, wireline, catering and fabrication service providers

An asset team that sends its production, maintenance and contract leads together gains most, because they leave sharing one view of deferment, cost and risk.

## Oil and Gas Professionals Skills Capabilities

Participants move from reading their own discipline to judging how a choice at the wellhead, separator or jetty ripples through barrels, cost per barrel and exposure.

- Map the hydrocarbon value chain from reservoir to customer — portfolio and asset priority discussions
- Calculate lifting cost, deferment and netback for an operating asset — budget owners and asset managers
- Assess major accident hazards with bow-tie barriers — process safety and operations authorities
- Design a shift handover and escalation routine — control room and field crews
- Communicate production performance to partners and host communities — joint venture and external stakeholders
- Specify contractor scope, key performance indicators and interfaces — procurement and contract holders

## Key Oil and Gas Professionals Skills Terms

- Lifting cost — the operating expense of bringing one barrel of oil equivalent to the surface, excluding capital and royalties.
- Production deferment — volume not produced against potential because of planned or unplanned downtime, tracked by cause.
- Netback — the value received per barrel after transport, processing and marketing costs are deducted from the selling price.
- Bow-tie barrier — a diagram linking threats, a top event and consequences through preventive and recovery controls.
- Permit to work — a written control authorising hazardous tasks, naming isolations, gas tests and responsible people.
- Joint operating agreement — the contract between partners in a licence setting out operator duties, voting and cost sharing.

## Oil and Gas Professionals Skills Day by Day

## Day 1: The Hydrocarbon Value Chain

- Upstream, Midstream and Downstream Segments — Where An Asset Earns Its Margin
- Crude Grades and Gas Specifications — Pricing Differentials and Buyer Requirements
- Reserves and Resources Under PRMS — Confidence Behind Production Forecasts
- National and International Oil Company Models — Partner Expectations and Decision Rights
- Energy Transition Pressures on Operations — Flaring, Methane and Licence to Operate

## Day 2: Asset Economics for Engineers

- Lifting Cost Breakdown — Targeting the Largest Controllable Operating Expenses
- Netback and Realised Price — Choosing Between Export Routes and Buyers
- Capital Versus Operating Expenditure Trade-Offs — Repair, Replace or Run to Failure
- Simple Payback and Net Present Value — Ranking Small Field Improvement Ideas
- Fiscal Terms and Cost Recovery Basics — How Partners Share Each Saving

## Day 3: Production Performance and Deferment

- Production Potential Versus Actual Curves — Exposing Hidden Losses on the Asset
- Deferment Coding by Cause — Prioritising Wells, Compressors and Export Systems
- Well Test and Allocation Data Quality — Trusting the Numbers Behind Targets
- Integrated Activity Planning — Sequencing Drilling, Maintenance and Shutdown Work
- Daily Production Meeting Structure — Turning Losses Into Assigned Actions

## Day 4: Operational Decision-Making

- Decision Framing for Field Supervisors — Separating Urgent Calls From Strategic Choices
- Root Cause Analysis With Five Whys and Fishbone — Stopping Repeat Equipment Trips
- Risk Matrix Use in Operations — Accepting, Mitigating or Escalating a Deviation
- Management of Change Process — Approving Temporary Bypasses and Plant Modifications
- Decision Logs and Assurance Trails — Defending Choices at Audit and Inquiry

## Day 5: Process Safety Leadership

- Major Accident Hazard Registers — Focusing Attention on Loss of Containment
- Bow-Tie Barrier Analysis — Verifying Preventive and Mitigating Controls in Service
- Permit to Work and Isolation Discipline — Controlling Simultaneous Operations on Site
- Leading and Lagging Safety Indicators — Spotting Barrier Decay Before an Incident
- Visible Safety Leadership Tours — Coaching Crews on Hazard Recognition

## Day 6: Integrity and Reliability Awareness

- Asset Integrity Lifecycle — Linking Design Limits to Operating Envelopes
- Risk-Based Inspection Logic — Allocating Scarce Inspection Hours to Critical Equipment
- Corrosion and Erosion Threats — When to Request Specialist Integrity Support
- Reliability Measures Such as Mean Time Between Failures — Sparing and Maintenance Priorities
- Safety Critical Element Backlogs — Reporting Overdue Work to Asset Leadership

## Day 7: Stakeholder Communication on the Asset

- Stakeholder Mapping for Operating Assets — Partners, Regulators, Communities and Unions
- Production Performance Briefings — Presenting Shortfalls and Recovery Plans Credibly
- Technical Report Writing for Non-Engineers — Gaining Approval for Funding Requests
- Incident Communication Protocols — Informing Partners and Communities After an Event
- Influencing Without Authority — Aligning Drilling, Subsurface and Operations Teams

## Day 8: Contractor Coordination and Interfaces

- Service Contract Types and Scopes — Matching Lump Sum or Day Rate to Work
- Contractor Key Performance Indicators — Measuring Rig, Wireline and Fabrication Delivery
- Interface Registers Between Operator and Contractors — Preventing Gaps in Responsibility
- Contractor Safety Management — Bridging Documents and Joint Site Inspections
- Variation and Claim Handling — Protecting Cost Without Damaging Relationships

## Day 9: Leading Crews Through Change

- Competence Assurance Matrices — Closing Skill Gaps as Senior Staff Retire
- Rotation and Remote Crew Dynamics — Sustaining Standards Across Back-to-Back Shifts
- Digital Oilfield Tools and Surveillance Centres — Redesigning Roles Around Real-Time Data
- Emissions Reduction Initiatives — Engaging Crews in Flaring and Venting Cuts
- Coaching Conversations With Technicians — Building Judgement in Junior Engineers

## Day 10: Practising the Personal Operations Improvement Plan

- Asset Value Chain Snapshot — Applying Day 1 to the Participant's Facility
- Deferment and Lifting Cost Baseline — Applying Days 2 and 3 to Local Data
- Barrier and Integrity Gap Review — Applying Days 5 and 6 to Site Risks
- Peer Challenge Panel — Testing Proposals Against Partner and Contractor Viewpoints
- Personal Operations Improvement Plan — Actions, Owners and Measures for the Asset

## Applying Oil and Gas Professionals Skills After the Course

- Lead a deferment review of the asset's top five loss causes, coding each one and assigning an owner through the daily production meeting.
- Run a bow-tie walk-through for one major accident hazard with the shift crew and report degraded barriers to the asset manager.

## Oil and Gas Professionals Skills Questions FAQ

### What are oil and gas professionals advanced skills and why do they matter now?

They are the cross-discipline abilities to link field choices to economics, process safety, partners and contractors. With volatile prices, transition pressure and retiring experts, operators need engineers and supervisors who see beyond one function and protect production safely.

### Which roles gain most from oil and gas professionals advanced skills?

Production and facilities engineers, shift supervisors, maintenance and integrity leads, planners and contract holders gain most. They already know their discipline and now carry decisions that affect barrels, cost, crews and service providers across the asset.

## How do oil and gas professionals advanced skills differ from a general supervisory course?

The difference is the oil and gas context. A general supervisory course covers people skills in any sector, while this course ties every method to lifting cost, deferment, process safety barriers, joint venture partners and oilfield service contracts.

## What do you bring back from oil and gas professionals advanced skills?

You bring back a personal improvement plan for your own asset. It holds a value chain snapshot, a deferment and cost baseline, a barrier gap review and owned actions that your line manager can track over the following quarter.

## Oil and Gas Professionals Skills: The Way Forward

The personal operations improvement plan gives each participant a dated set of actions on deferment, cost and barriers for their own facility. Its first use is the next monthly asset review, where the asset manager and operations superintendent decide which actions to fund. After the first quarter, revisit the contractor and stakeholder sections, because partner priorities and service scopes shift with price and production.