

Well Control Specialist: Underbalanced Operations & Well Control Technique

Course Outline:

Module 1: Fundamentals of Well Control and Pressure Concepts

- Introduction to well control principles
- Hydrostatic, formation, and fracture pressure
- Primary vs. secondary well control
- Pore pressure prediction and kick indicators
- Overview of underbalanced drilling (UBD) vs. conventional drilling
- Well control equipment and surface system basics

Module 2: Underbalanced Drilling (UBD) Principles and Applications

- Objectives and benefits of UBD
- Fluid systems used in UBD (foam, mist, gasified fluids, etc.)
- Equipment setup for UBD (rotating control device, choke manifolds)
- Candidate well selection criteria
- Real-time pressure management during UBD
- HSE considerations in underbalanced operations

Module 3: Kick Detection, Shut-In Procedures & Risk Mitigation

- Kick causes in underbalanced and overbalanced conditions
- Kick detection methods in real-time
- Shut-in procedures and decision-making

EXPERT

EXPERT & PROFESSIONAL EXCELLENCE FOR TRAINING & CONSULTATIONS

- Kick tolerance and influx management
- Gas migration behavior and safety precautions
- Blowout prevention (BOP) system role in UBD

Module 4: Advanced Well Control Techniques & Kill Methods

- Stripping operations and snubbing units
- Bullheading, volumetric method, and lubrication techniques
- Constant bottomhole pressure (CBHP) techniques
- Managed Pressure Drilling (MPD) integration
- Surface and subsea well control scenarios
- Well control simulations and case studies

Module 5: Real-Time Monitoring, Emergency Response & Case Studies

- Real-time data interpretation for pressure and flow
- Alarm systems and automated kick detection
- Emergency well control procedures
- Incident investigation and root cause analysis
- Review of real-world blowout and UBD incidents
- Best practices and lessons learned

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| Location | Dubai – Shangri-La Hotel |
| Start Date | 27 July 2025 |
| End Date | 31 July 2025 |