CONCEPT

Competence Management Systems for Oil and Gas Safety-Critical Roles

15 – 19 August 2027
Riyadh - KAFD district five-star



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Ref: 921_21383 **Date:** 15 – 19 August 2027 **Location:** Riyadh - KAFD district five-star **Fees:** 20000 SAR

Introduction:

In oil, gas and energy plants, operators, technicians and supervisors are often released to safety-critical work on the strength of attendance certificates and time on shift, and incident investigations then find that nobody could show they were competent for the task that failed. A competence management system links each hazardous task to a competence standard, structured on-the-job training, verified assessment and a reassessment interval. This Core Concept course equips technical training, HSE and operations managers to build that system and produce a Competence Management System Design for a case operations team.

Course Objectives:

- Identify safety-critical and technical roles from task risk assessments and build a register of the tasks each role performs
- Write role profiles and technical competence standards with proficiency levels and a site competence matrix
- Design structured on-the-job training with task books, sign-off stages and supervised practice before independent work
- Set assessment and verification arrangements that combine observation, questioning and simulation with a reassessment interval
- Run gap analysis, individual development plans and competence controls for temporary staff and contractors
- Produce a Competence Management System Design with records, audit arrangements and competence assurance KPIs for an operations team

Target Audience:

- Technical training and L&D managers who run operator, technician and maintenance development programmes
- HSE managers who hold process safety and major accident prevention arrangements
- Operations and maintenance managers who authorise staff to work on hazardous plant
- Competence and workforce development leads who keep training matrices and competence records
- Contractor management and HR managers who approve the competence of temporary and third-party personnel

Course Outline:

Day 1: Why Competence Management Matters for Safety-Critical Work

- Competence Definition: Skills, Knowledge and Experience Applied to a Recognised Standard
- Incident Case Reviews Where Competence Gaps Contributed to Loss of Containment
- Training Records Versus Demonstrated Competence: The Certificate Trap
- Competence Management System Lifecycle: Requirements, Design, Implementation, Maintenance and Review
- Current-State Scan of Site Training Matrices and Authorisation Practice

Day 2: Safety-Critical Roles, Standards and Competence Matrices

- Safety-Critical Task Register Built From Hazard and Task Risk Assessments
- Technical Role Profiles for Control Room, Field Operator and Maintenance Technician Roles
- Competence Standard Writing: Performance Criteria, Range and Underpinning Knowledge
- Dreyfus Proficiency Levels Adapted to Awareness, Supervised, Independent and Coach Grades
- Site Competence Matrix Linking Roles, Tasks, Levels and Reassessment Intervals

Day 3: On-the-Job Training, Task Books and Verification

- Structured On-the-Job Training Plans With Staged Supervised Practice
- Operator and Technician Task Book Design With Sign-Off Stages
- Assessment Method Mix: Workplace Observation, Technical Questioning and Simulator Scenarios
- Assessor and Verifier Roles, Selection and Calibration Within the System
- Competence Records, Learning Management System Fields and Authorisation Certificates

Day 4: Gaps, Contractors, Audits and Process Safety Links

- Competence Gap Analysis and Individual Development Plans After Role or Plant Change
- Temporary Staff, Contractor Pre-Qualification and Intelligent Customer Capability
- Refresher Training and Reassessment for Infrequent, Complex and Emergency Tasks
- Competence Assurance Audit Protocol and Leading and Lagging KPIs
- Competence Findings in Process Safety Incident Investigation and Barrier Management

Day 5: Case Study: Competence Management System Design

- Case Operations Team Brief: Gas Processing Unit Roles, Tasks and Existing Records
- Safety-Critical Role Selection and Competence Matrix Build for the Case Team
- Task Book, Assessment Plan and Reassessment Schedule Drafting
- Contractor Controls, Records Design and Assurance KPI Dashboard
- Competence Management System Design Presentation and Peer Challenge

Skills You Will Gain:

- Safety-Critical Task Identification
- Technical Competence Standard Writing
- Competence Matrix Design
- Task Book Development
- Competence Verification Planning
- Contractor Competence Control
- Competence Assurance Auditing
- Competence Record Management

Why Attend This Course:

- Leave with a Competence Management System Design for a case operations team, tested through peer challenge
- Replace attendance-based sign-off with task books and verified assessment that can be shown to an incident investigator or auditor
- Close the gap between contractor paperwork and the competence contractors actually bring to hazardous plant
- Compare competence practice with training, HSE and operations managers from upstream, refining, petrochemical and power organisations

Conclusion:

Competence in hazardous operations has to be shown, recorded and kept current, not assumed from attendance. The week moves from the case for competence management and its lifecycle, through safety-critical role selection, competence standards and matrices, to structured on-the-job training, task books, verification and records. Gap analysis, contractor controls, audits, KPIs and incident links follow. The final day applies each element to a case operations team and produces a Competence Management System Design ready to adapt at work.