Asset Integrity Management for the Petroleum Industry

Date (\$)Fees

13 July -17 July 2025 SALALA 3200 Register Now

Why Choose this Training Course?

An Asset Integrity Management (AIM) program provides a backbone and incorporates design, maintenance, inspection, process, operations, and management concepts, making optimal return on investments.

This course initiates with the concept of Asset Management (AM) in the offshore and onshore industry (ISO 55000). Then, it focuses on the concept of AIM (i.e. design, technical and operation integrity) in the safeguarding of operational system. The approaches to reliability centered maintenance (RCM), failure mode effect and criticality analysis (FMECA), risk based maintenance (RBI), inspection of static process equipment, maintenance planning of rotating equipment, mitigate the challenges due to human factor, effective project management strategies, etc. are delivered.

What are the Goals?

- Manage assets in petroleum industry in sustainable and safe manner
- Assess & control Asset Integrity of operational assets in production & process systems
- · Perform integrity management on topside and sub-sea systems
- Realize overall asset process in a systems engineering perspective
- Use of adaptive technologies and techniques in engineering projects

Who is this Training Course for?

- Engineering Asset Management & Asset Integrity Management personnel
- Technical Safety personnel
- Engineers involved in maintenance and modification projects
- · Inspection and maintenance analysis and planning personnel
- · Project managers and project engineers
- · Technical discipline responsible personnel

How will this Training Course be Presented?

The course is presented with the support of industrial case studies to deliver the main concepts. Apart from

that basic theory, concepts and related standards/regulations/guidelines are explained briefly to point out the AIM related applications in the real life projects. Power point presentations, group discussions, and sharing of project experiences are formally harmonized during the sessions.

The Course Content

Day One: Asset Integrity Management

- Introduction to concept of Asset Management& Asset Integrity Management
- Asset Management Landscape process model
- The Asset Management System Asset Management Policy Asset Management Strategy (Strategic) Asset Management Plans – line of sight
- · Asset Management roles
- International standard on Asset Management: ISO 55000
- Certification

Day Two: Risk & Risk Assessment

- Approaches Used for Asset Integrity Management
- · Identification & assessment of risk
- · Risk management: using the risk matrix, risk register & hazard log
- · Risk on business level, system level and asset level
- · Several methodologies on different levels
- · Contingency planning

Day Three: Risk Based Maintenance

- · Deterioration: the way assets could fail
- The seven steps of Risk Based Maintenance (RBM) / Reliability Centred Maintenance (RCM) incl. Failure Mode Effects & Criticality Analysis
- Failure behaviour of onshore & offshore systems
- Choosing the right maintenance task
- Risk Based Inspection
- Practical application

Day Four: Life Cycle Management Aspects

- · Life cycle of an asset
- Systems Engineering & RAMS specification
- Operational workflow
- Life time extension
- · Performance measurement / KPI's

Day Five: The Way Forward: Improvement Plan Workshop

- Assessment of current Asset Management performance (specific aspects)
- Drawing up an improvement plan / individual improvement plans to optimize the cost/ benefits



