
Process Plant Reliability and Maintenance





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Process Plant Reliability and Maintenance is a five-day senior management course delivered by Mars Training Centre at its international training centres — in London, Dubai, Al Jubail, Jakarta, and Prague — designed for plant managers, reliability and maintenance directors, and senior operational leaders in process industries.

Reliability is the most underrated source of margin in any process industry. The difference between 95 and 98 per cent asset availability rarely makes the headlines, but it dictates everything from cash flow to safety record to the credibility of management with the board. Senior leaders in refineries, petrochemical plants, gas processing, power generation, and other capital-intensive industries spend much of their working lives inside this gap — and most have built their practice through experience rather than structured study.

This programme gives senior operational leaders a structured framework for thinking about reliability and maintenance at executive level. You will work through reliability-centred maintenance, asset management strategy, turnaround discipline, the maintenance organisation, and the digital and predictive tools reshaping operations. The orientation is senior leadership, not technician training.

What You Will Learn

- Apply reliability-centred maintenance thinking at senior level.
- Evaluate asset management strategy against business performance.
- Analyse plant performance metrics: OEE, availability, MTBF, and MTTR.
- Diagnose the principal failure modes in process plant operations.
- Assess turnaround planning, execution, and economics at executive level.
- Lead a maintenance organisation through performance change.
- Evaluate the role of predictive maintenance and digital tools.
- Apply risk-based inspection thinking to process plant decisions.
- Position reliability as a board-level commercial discipline.
- Build a personal leadership practice for senior operational roles.

How You Will Benefit

You will leave with a structured senior-level command of process plant reliability and maintenance, sharper questions for your operations and engineering teams, and a clearer leadership practice — and a Mars Certificate of Completion.

Your organisation will gain a senior operational leader who can lift availability, run major turnarounds with stronger discipline, and convert reliability performance into measurable commercial value.



Who This Programme Is For

This programme is designed for senior operational professionals in process industries, including:

- Plant managers and deputy plant managers
- Reliability and maintenance directors
- Operations directors in process industries
- Asset management leaders and engineering directors
- Senior turnaround and outage directors
- Senior project and commissioning leads
- General managers responsible for operational performance

The seniority floor is senior manager and above.