BLACKBIRD FOR TRAINING

Shutdown, Turnaround & Maintenance Cost Optimization



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Introduction

This advanced one-week course provides a practical and managerial approach to planning, executing, and controlling major shutdowns and turnarounds. It focuses on **scope optimization, work-pack readiness, scheduling, contractor productivity, cost control, risk management, quality, startup readiness, and continuous improvement**.

Course Objectives

By the end of this course, participants will be able to:

- Develop effective turnaround strategies and objectives.
- Challenge, optimize, prioritize, and control turnaround scope.
- Develop work packages and assess execution readiness.
- Build and control integrated turnaround schedules.
- Apply Critical Path Method CPM and manage critical activities.
- Optimize manpower, materials, equipment, and contractors.
- Manage contractor productivity and performance.
- Identify and mitigate turnaround risks.
- Establish budgets, track costs, and forecast final expenditure.
- Apply quality assurance and control during execution.
- Manage startup, commissioning, handover, and return-to-service readiness.
- Measure performance, benchmark results, capture lessons learned, and drive improvement.

Course Outline - 1 Week

Day 1 - Turnaround Strategy & Scope Optimization

- Turnaround strategy and lifecycle
- Objectives and success criteria
- Scope identification, challenge, validation, and prioritization
- Scope optimization and value-based decisions
- Scope freeze and change control
- Governance and responsibilities

Day 2 - Planning, Work-Packs, Scheduling & Resources



- Integrated turnaround planning
- WBS and work-pack development
- Work-pack readiness assessment
- Activity sequencing and duration estimation
- CPM and critical-path management
- Schedule constraints and milestones
- Manpower, materials, equipment, and contractor planning
- Execution readiness

Day 3 - Execution, Risk, Contractors & Quality

- Execution control and progress monitoring
- Contractor productivity and performance
- Risk assessment and mitigation
- Permit-to-work and SIMOPS
- Schedule deviation and recovery planning
- Quality assurance and quality control
- Inspection, punch lists, and rework management

Day 4 - Cost Optimization & Forecasting

- Turnaround cost structures and budgeting
- Cost estimation and baseline development
- Cost tracking and reporting
- Cost forecasting and Estimate at Completion EAC
- Scope growth and change-order control
- Contractor and procurement cost optimization
- Productivity and cost efficiency

Day 5 - Startup, Performance & Continuous Improvement

- Startup and commissioning readiness
- Mechanical completion and handover
- Punch-list closure and return-to-service readiness
- KPI and performance measurement
- Cost, schedule, productivity, and quality performance
- Downtime and production-loss measurement
- Lessons learned and Root Cause Analysis
- Turnaround benchmarking and improvement roadmap

Why Attend This Course?

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- Optimized turnaround scope
- Better work-pack readiness
- Improved critical-path and schedule control
- Higher contractor productivity
- Stronger cost forecasting and control
- Improved quality and risk management
- Faster startup and reduced downtime
- Effective benchmarking and continuous improvement

Potential Losses Without These Capabilities

- Scope creep and unnecessary expenditure
- Schedule and critical-path delays
- Contractor productivity problems
- Cost overruns
- Quality failures and rework
- Delayed startup
- Increased production losses
- Repeated turnaround problems

Conclusion

This course equips managers and turnaround professionals with the tools to **plan, optimize, execute, control, and improve major shutdowns and turnarounds**, balancing **time, cost, quality, reliability, risk, and operational performance**.

FAQ

Who should attend?

Maintenance Managers, Turnaround Managers, Shutdown Managers, Asset Managers, Maintenance Engineers, Planners, Planning Managers, and related professionals.

Is it an advanced course?

Yes. It is designed for experienced professionals and managers.

What is the duration?

1 week, 4 hours per day — 20 training hours.

Does it cover all key turnaround requirements?



Yes. It covers **strategy, scope optimization, work-pack readiness, scheduling, critical-path management, contractor productivity, cost forecasting, risk, quality, startup readiness, lessons learned, and benchmarking.**

