

Course No. 1844

Turnaround Planning, Scheduling & Execution Training Course

**MECHANICAL MAINTENANCE, RELIABILITY & TURNAROUND
OIL & GAS**

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Turnaround Planning, Scheduling & Execution Training Course provides a comprehensive professional program focused on the planning, scheduling, preparation, execution, and control of major turnaround events in oil & gas, refining, petrochemical, power generation, and industrial facilities. The course is designed to help organizations complete complex turnaround activities safely, efficiently, on schedule, and within approved cost and quality targets.

Participants will examine the complete turnaround planning cycle, beginning with scope development and work identification and continuing through work-pack preparation, resource planning, procurement, contractor mobilization, detailed scheduling, field execution, progress control, commissioning, and startup. The program emphasizes disciplined preparation as the foundation for successful turnaround execution.

A major focus is placed on schedule development and optimization. Participants will learn how to develop work breakdown structures, activity networks, logic relationships, milestones, constraints, critical paths, resource-loaded schedules, and realistic execution windows. The course also addresses schedule risk, productivity assumptions, work-front availability, and coordination of simultaneous activities.

The execution phase focuses on field readiness, daily work control, productivity management, safety, quality, scope changes, delay management, contractor performance, and communication. Through practical exercises and realistic turnaround scenarios, participants will develop the ability to control execution, respond to emerging issues, protect the critical path, and achieve a controlled and timely plant restart.

Objectives

- By the end of the course, participants will be able to:
- Analyze the principles and business objectives of effective turnaround management.
- Develop and validate comprehensive turnaround scopes.
- Structure turnaround activities using appropriate work breakdown methodologies.
- Develop detailed and logic-driven turnaround schedules.
- Identify critical-path activities, constraints, interfaces, and schedule risks.

- Optimize manpower, equipment, materials, contractors, and work fronts.
- Establish effective work-pack and execution-readiness processes.
- Develop realistic turnaround milestones and performance targets.
- Apply effective field execution and daily work-control practices.
- Monitor progress, productivity, schedule performance, and resource utilization.
- Manage scope changes, delays, constraints, and emerging execution risks.
- Strengthen coordination between operations, maintenance, engineering, inspection, contractors, procurement, and HSE.
- Improve commissioning, startup, and handover readiness.
- Evaluate turnaround performance and identify lessons learned.
- Develop improvement actions for future turnaround events.

Who Should Attend

This course is designed for turnaround managers, maintenance managers, project managers, planners, schedulers, maintenance engineers, operations personnel, engineering professionals, inspection specialists, and HSE professionals involved in major turnaround activities.

It is also suitable for work-pack planners, cost controllers, contractor managers, procurement and materials personnel, field supervisors, commissioning teams, reliability professionals, and technical specialists responsible for turnaround preparation and execution.

The program is particularly valuable for senior managers, plant leaders, asset managers, and decision-makers responsible for minimizing downtime, controlling turnaround costs, maintaining operational safety, optimizing resources, and achieving successful plant restart.

Learning Outcomes

- Upon completion of the course, participants will be able to:
- Explain the complete turnaround planning, scheduling, and execution cycle.
- Develop structured and risk-informed turnaround scopes.
- Build work breakdown structures and detailed work packages.

- Develop integrated turnaround schedules with logical activity relationships.
- Identify critical-path activities and schedule constraints.
- Establish realistic milestones and execution targets.
- Develop resource-loaded plans for manpower, materials, equipment, and contractors.
- Assess turnaround readiness before field execution.
- Coordinate work fronts and simultaneous activities effectively.
- Monitor daily progress and productivity against the approved schedule.
- Identify schedule slippage and implement recovery actions.
- Control changes, delays, scope growth, and execution risks.
- Improve contractor coordination and performance management.
- Support effective commissioning, handover, and startup readiness.
- Conduct post-turnaround performance reviews and develop improvement plans.

Course Outline

DAY 01

Turnaround Scope Development & Strategic Planning

- Turnaround objectives, lifecycle, governance, and success criteria.
- Scope identification, work selection, validation, screening, and prioritization.
- Integration of maintenance, inspection, reliability, engineering, and statutory requirements.
- Scope risk assessment, work categorization, and early planning decisions.

PRACTICAL APPLICATION

Develop and prioritize a turnaround scope for a selected refinery or industrial facility.

DAY 02

Detailed Turnaround Planning & Work-Pack Development

- Work breakdown structures, activity definition, task sequencing, and work packages.
- Job plans, labor requirements, materials, tools, equipment, and specialist resources.

DAY 02 — CONTINUED

- Procurement planning, materials readiness, contractor mobilization, and work-front preparation.
- Readiness reviews, planning milestones, constraints, and pre-turnaround requirements.

PRACTICAL APPLICATION

Develop detailed work packages and a readiness plan for selected turnaround activities.

DAY 03

Turnaround Scheduling & Critical-Path Management

- Schedule development, activity logic, dependencies, milestones, and execution windows.
- Critical-path analysis, float management, constraints, and schedule risk.
- Resource loading, productivity assumptions, work-front optimization, and schedule leveling.
- Integrated coordination of operations, maintenance, inspection, engineering, contractors, and HSE.

PRACTICAL APPLICATION

Build and optimize a turnaround schedule and identify the critical path and major schedule risks.

DAY 04

Turnaround Execution & Field Control

- Execution readiness, work-front management, permits, isolations, and field coordination.
- Daily planning, progress measurement, productivity monitoring, and performance reporting.
- Management of delays, constraints, scope changes, technical issues, and recovery actions.
- Contractor performance, quality control, safety leadership, and execution discipline.

PRACTICAL APPLICATION

Manage a simulated turnaround execution scenario involving delays, resource shortages, scope changes, and critical-path risks.

DAY 05

Commissioning, Startup & Turnaround Performance Improvement

- Work completion, punch-list management, system handover, and commissioning readiness.
- Startup planning, operational readiness, coordination, and stabilization.
- Turnaround performance measurement, schedule and productivity analysis, and management reporting.
- Post-turnaround review, lessons learned, root-cause analysis, and continuous improvement.
- Final Application: Develop an integrated turnaround planning, scheduling, and execution strategy covering scope, work packages, resources, schedule logic, critical path, readiness, field execution, progress control, delay recovery, contractor management, commissioning, startup, performance measurement, and improvement actions.

Register or Request More Information

Course page: <https://quest-training.com/courses/turnaround-planning-scheduling-execution-training-course>

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