

Introduction to Managing Shutdowns, Turnarounds, and Outages

Planning and managing shutdowns, turnarounds, and outages in a process plant setting is a complex and essential function. These operations are critical to maintaining a plant's efficiency and can have significant consequences if not handled properly. Successful shutdown and turnaround management requires careful attention to prevent budget overruns, avoid costly delays, and minimize negative impacts on customers.

This course is specifically designed to equip participants with the necessary skills and knowledge to manage these high-stakes events effectively. The curriculum combines practical experience in turnaround planning and execution with insights from seasoned professionals, along with a focus on the latest industry trends and best practices in shutdown, turnaround, and outage management.

Participants will learn the foundational principles of effective turnaround management, emphasizing the need for cross-departmental collaboration, coordination with contractors, and utilizing resources efficiently to meet organizational goals and achieve successful turnarounds.

Target Audience

- Turnaround Managers
- Planners
- Schedulers
- Reliability Engineers
- Maintenance Managers
- Maintenance Supervisors
- Project Managers
- Project Engineers
- Operations Managers
- Shift Managers
- Operations Supervisors
- Contractors seeking to improve the shutdown and turnaround performance for their clients.

Course Objectives

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

- Enhance the organization's turnaround management capabilities, fostering a team-based approach to planning and executing plant shutdowns and turnarounds.
- Gain a comprehensive understanding of effective turnaround management practices and how to execute them successfully.
- Understand strategic planning techniques and adopt an integrated approach for achieving successful turnarounds.
- Stay updated on emerging trends in turnaround planning and management.
- Streamline the planning and execution process of shutdowns and turnarounds to ensure a smooth and professionally rewarding experience, minimizing stress and conflict.

Targeted Competencies

Upon completion of this course, participants will be able to:

- Develop a shutdown strategy tailored to their organization's needs.
- Plan and manage shutdowns and turnarounds effectively.
- Understand the full scope of shutdown management from start to finish.
- Execute shutdowns and turnarounds with efficiency and precision.

Course Content

Unit 1: Foundations of Shutdown and Turnaround Management

- Overview of shutdown and turnaround management.
- Developing a shutdown planning strategy.
- Addressing common issues and challenges in shutdowns and turnarounds.
- Engaging in detailed management planning for shutdowns.

Unit 2: Preparing for a Successful Shutdown/Turnaround

- Preparing the plant for maintenance shutdowns.
- Developing the work scope and work breakdown structures (WBS).
- Defining organizational roles for effective management.

Unit 3: Advanced Planning Techniques for Shutdowns and Turnarounds

- Crafting detailed and effective shutdown and turnaround plans.
- Utilizing critical path planning techniques.
- Implementing “short-cut” planning methods for faster execution.
- Learning scheduling techniques for overlapping projects.

Unit 4: Mastering Costs, Control, and Contractor Engagement in Shutdowns

- Creating accurate shutdown budgets.
- Monitoring progress, controlling costs, and tracking productivity during shutdowns.
- Managing material logistics and planning during shutdowns.
- Effective contractor management during shutdown operations.

Unit 5: Prioritizing Safety, Quality, and Risk Management

- Commitment to safety, quality, and environmental standards.
- Implementing risk management strategies in shutdowns.
- Integrating risk management insights into the comprehensive shutdown plan.
- Summarizing the key takeaways from the course.

This course will provide participants with the tools and knowledge to effectively lead or contribute to the complex processes of shutdowns, turnarounds, and outages, ensuring that operations are carried out

successfully and with minimal disruptions.

