



# Managing Shutdowns, Turnarounds And Outages



## Introduction:

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Planning and managing shutdowns, turnarounds and outages in the process plant environment is a complex and demanding function. If turnarounds are not properly planned, managed and controlled, companies run the risks of serious budget overruns, costly schedule delays and negative impacts on customers.

This programme has been developed to specifically respond to the need to help owners and contractors meet their turnaround goals. In the development of this training programme, a combination of extensive hands-on experience in turnaround planning and execution, input from turnaround teams, and emerging industry trends were blended together to establish best practice turnaround management approaches.

This programme is designed to establish a thorough understanding of the fundamentals of effective turnaround management. Numerous examples and case studies based on completed turnarounds are used to emphasize major strategic planning and management issues essential to successful turnarounds.

The programme emphasises that company staff from different departments, contractors and vendors must combine their knowledge, resources and energies, and work as a unified team to successfully achieve company goals and turnaround objectives.

## Who Should Attend?

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- This programme is designed to be beneficial for both the owner's and contractor's staff, who are involved in the planning, co-ordination and execution of plant shutdowns and turnarounds
- The programme is especially valuable for turnaround managers and coordinators, planning/scheduling and cost control staff, construction superintendents and supervisors, operations coordinators, project engineers and contract administrators. Participation from inspection, materials, safety and maintenance engineering is also encouraged

## TRAINING METHODOLOGY:

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Shutdowns, Turnarounds and Outages is a hands-on, stimulating learning experience.

The programme will be highly interactive, with opportunities to advance your opinions and ideas. Participation is encouraged in a supportive environment.

To ensure the concepts introduced during the programme are understood, they will be reinforced through a mix of learning methods, including lecture style presentation, open discussion, case studies, simulations and group work.

## PROGRAMME SUMMARY:

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Organizations who expose participants to the training and development experience provided by this programme will be contributing to building a core of knowledgeable and skilled staff who will be able to add value through their contributions to more effective preparation, planning, scheduling, execution and control of shutdowns and turnarounds.

They will be able to contribute in leadership or operational roles, both with knowledge and skills to ensure shutdowns and turnarounds are effectively planned, scheduled and executed and leverage these techniques to improve productivity and cost effectiveness.

## Course Objectives:

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- To enhance the company's turnaround management capabilities, and to ensure a team approach in the planning and execution of plant shutdowns and turnarounds.
- Provide a comprehensive understanding of effective turnaround management techniques and implementation
- Create awareness of strategic planning methods and an integrated organizational approach in the execution of successful turnarounds.
- Incorporate latest developments in turnaround planning and management techniques and emerging industry trends
- Make the turnaround planning and execution process efficient, professionally rewarding and with the minimum stress and conflict.

## Course Outline:

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### DAY 1 - Introduction to Shutdowns and Turnarounds

- Overview and Introduction
- Shutdown Planning Strategy
- Shutdown/TA problems and issues.
- Management planning

### DAY 2 - Shutdown/Turnaround Preparation

- Plant shutdown and preparation for maintenance

- Work Scope Development and Work Breakdown Structures
- Case Study work
- Organization and Roles

### **DAY 3 - Shutdowns/Turnaround Planning Techniques**

- Developing Shutdown and Turnaround Plans
- The Critical Path Planning Method
- "Short Cut" Planning Methods
- Scheduling multiple projects

### **DAY 4 -Costs, Control and Contractors**

- Developing shutdown budgets
- Progress, cost control and productivity tracking
- Materials planning and control
- Contractor Management

### **DAY 5 - Safety, Quality and Risk Management**

- Safety, Quality and Environmental Management
- Risk Management
- Integrating risk management into the shutdown plan

### **Conclusion**