

**Course Overview:**

This beginner-level course is tailored for maintenance and engineering staff, focusing on the essentials of shutdown maintenance. Participants will learn about planning, executing, and managing maintenance activities during plant or facility shutdowns. The course aims to equip learners with the skills to minimize downtime, ensure safety, and maintain operational efficiency. Key topics include shutdown planning, risk management, and effective communication during maintenance periods.

**Course Objective:**

- Understand the core principles and importance of shutdown maintenance in industrial operations
- Develop and implement comprehensive shutdown maintenance plans
- Apply effective safety and risk management protocols
- Enhance coordination and communication among maintenance teams
- Utilize modern technologies to optimize maintenance tasks

**Course Outline:**

1. Fundamentals of Shutdown Maintenance
  - Shutdown Maintenance Overview
  - Importance in Industrial Operations
  - Types of Maintenance Shutdowns
2. Planning and Preparation
  - Developing a Shutdown Plan
  - Resource Allocation
  - Preparing Maintenance Checklists
3. Safety Management
  - Safety Protocols and Procedures
  - Risk Assessment and Mitigation
  - Emergency Response Planning
4. Execution of Shutdown Maintenance
  - Effective Task Management
  - Team Coordination and Communication
  - Dealing with Unexpected Issues
5. Quality Control and Assurance
  - Quality Standards in Maintenance
  - Inspection and Testing Procedures
  - Documentation and Reporting
6. Cost Management
  - Budgeting and Cost Control
  - Efficiency Optimization
  - Cost-Benefit Analysis of Maintenance Activities
7. Post-Shutdown Activities
  - Equipment Startup Procedures
  - Performance Evaluation
  - Lessons Learned and Continuous Improvement
8. Technology in Shutdown Maintenance

**Training Language:**

English/Arabic

**Training Methodology:**

The course combines various teaching methods, including instructor-led presentations, group discussions, case study analyses, and assessments through quizzes and a final exam to engage participants and ensure they understand and retain the material.

- Innovative Maintenance Technologies
- Digital Tools for Maintenance Planning
- Future Trends in Maintenance

**Who Should Attend:**

- Maintenance technicians
- Junior engineers
- Plant supervisors
- Facility managers