

Process Plant Shutdown and Critical Activities: Isolation, Startup & Commissioning

Course Title	Process Plant Shutdown and Critical Activities: Isolation, Startup & Commissioning
Country	Dubai
Location	4-5 Star Hotel
Time	8AM - 2PM
Session Duration	5 Days per Session
Dates	01-05 September 2025 14-18 September 2025 05-09 October 2025
Price	KWD 1495 Per person
Notes	This course will run weekly throughout the season

Objectives:

- Understand the importance of plant shutdowns in the life cycle of process plants.
- Identify the various types of shutdowns: planned, emergency, and corrective.
- Overview of shutdown planning and preparation processes.
- Learn the critical isolation procedures for safely shutting down process units.
- Understand the safety requirements and regulatory compliance during isolation.
- Gain knowledge of startup activities post-shutdown.
- Understand how to safely transition from shutdown to normal operation.
- Understand the commissioning process for new or modified equipment and systems.
- Learn about commissioning checks and verification activities
- Review the post-shutdown performance of the plant and identify any issues.
- Understand how to improve future shutdown and startup processes.

▪ **Day 1: Introduction to Process Plant Shutdown**

- Shutdown planning: objectives and strategies.
- Pre-shutdown activities: inspection, resource allocation, and preparation.
- Roles and responsibilities during a shutdown.
- Identifying potential challenges during plant shutdown.

▪ **Day 2: Isolation Procedures and Safety Measures**

- Types of isolations: mechanical, electrical, and instrumentation isolations.
- Lockout and tag-out (LOTO) procedures.
- Hazard identification and risk assessments (HIRA).
- Safety standards and compliance during shutdown activities.
- Case study: Best practices in isolation.

▪ **Day 3: Startup Procedures & Activities**

- Start-up checklist and sequence of operations.
- Safety precautions during the startup phase.
- Start-up testing and performance checks.
- Startup troubleshooting: identifying and solving common issues.
- Coordination between operators, engineers, and other stakeholders during startup.

▪ **Day 4: Commissioning of Process Units**

- Commissioning phases: pre-commissioning, mechanical completion, and commissioning.
- Role of commissioning in plant optimization and performance validation.
- Common commissioning challenges and how to address them.
- Equipment testing, system verification, and start-up approval processes.
- Coordination with design and operational teams during commissioning.

▪ **Day 5: Post-Shutdown Evaluation and Performance Monitoring**

- Post-shutdown review and troubleshooting: identifying areas of improvement.
- Monitoring plant performance during the initial startup phase.
- Continuous improvement: lessons learned and feedback loops.
- Documenting the shutdown and startup process for future reference.