

## 2-Day Course Shutdown, Turnaround & Outage (STO) Control

**Shutdown, Turnaround, and Outage (STO)** refers to planned events where industrial plants are temporarily shut down for maintenance, inspection, and upgrades. Timely preparation and comprehensive control will make the difference between a successful STO and a failure. Learn how to plan, budget, schedule and control the execution of STOs from experts in the field. This course equips participants with the necessary skills and knowledge, leveraging best practices and the latest industry standards.

## **Course objectives**

Know how to plan a STO:

- Estimating and budgeting
- Risk and contingency
- Work package planning
- Scheduling and resource management
- Tendering and contracting

Learn to control the execution:

- Progress measurement
- Cost control and forecasting strategies
- **Course content**
- STO Strategy and economics
- Estimating & budgeting
  - Estimating types through the STO lifecycle
  - o Risk and contingency
- Contract management & tendering
  - Contracting strategies
  - Contractor evaluation and selection
- Scheduling
  - o Long range planning & milestones
  - o Ghant charts & CPM methods
  - o Resource levelling
- Cost control
  - Setting up a baseline for control
  - o Earned value management
- **Target Audience** 
  - STO Managers and Coordinators
  - Maintenance and Reliability Engineers
  - Project Managers
  - Cost estimators
  - Schedulers
  - Cost and project controllers
  - Contract managers
  - STO team members

- Performance management
- Change management

How to close out the STO:

- Analyzing STO effectiveness
- Continuous improvement

Learn from case studies and practical examples:

- Analysis of real-world STO examples
- Interactive exercises and problem solving
- Progress management
  - o Progress measurement techniques
  - Monitoring the preparation and execution phases
- Change management
  - Scope change management process
  - o Field change management process
- Benchmarking
  - o Data analytics
  - o Typical benchmarks for STO
- System integration
  - o Setting up integrated STO processes
  - o Transition to digital solutions
  - Latest developments

The duration of this course is 2 days. On request, an in-company training can be given as well. Participants will receive a certification upon successful completion of the course. This course can be complimented by following our 2-day STO Management course.

More information at: www.costengineeringacademy.eu