



**SHUTDOWN
TURNAROUND &
OUTAGES
EXCELLENCE
WORKSHOP
HRDF 10001520579
6-8 OCT 2025**



TRAINER : EJ LISTER

COURSE OVERVIEW STO EXCELLENCE WORKSHOP



Shutdowns, Turnarounds, and Outages (STO) events are among the most complex and high-risk projects in industrial settings. From the massive mobilization of transient workforces to managing hazardous environments, STO events demand exceptional planning, coordination, and execution. This course provides a comprehensive framework to help professionals navigate the intricacies of STO event management, ensuring efficiency, safety, quality, and cost control while maintaining project scope integrity.

- Scope and budget control and detailed planning for heavy industry STO events
- Innovative techniques to demystify the scheduling process beyond basic scheduling tool application and nice-looking Gantt charts
- Reliable and efficient execution controls to improve safety, quality, and tool time efficiency at the workplace... and much more!

Duration : 3 Days

ORACLE Gold
Partner

Specialized
Primavera P6 Enterprise
Project Portfolio
Management 8

COURSE OBJECTIVE

By the end of this course, participants will: Understand the challenges and risks associated with STO events. Learn industry best practices and lessons learned from international experience. Gain insights into cross-functional integration and stakeholder coordination. Develop skills for strategic and detailed planning to enhance effectiveness and efficiency. Explore tools and techniques for optimizing safety, tool-time efficiency, schedule duration, and cost.

TARGET AUDIENCE

This course is designed for professionals involved in STO events, including:

- ◆ **Shutdown Managers & Coordinators**

- Responsible for overall STO execution.

- ◆ **Planners & Schedulers**

- Developing strategic and detailed event plans.

- ◆ **Maintenance & Operations Teams**

- Ensuring seamless execution and risk mitigation.

- ◆ **HSE (Health, Safety, Environment) Professionals**

- Managing safety protocols.

- ◆ **Procurement & Supply Chain Teams**

- Handling vendor and material coordination.

- ◆ **Project & Construction Managers**

- Overseeing contractor performance and compliance.

- ◆ **Engineering & Technical Personnel**

- Supporting detailed job package planning

TARGET INDUSTRY

The targeted industry for the 3-Day STO (Shutdown, Turnaround, and Outage) Execution Excellence Workshop is primarily:

- Oil & Gas
- Petrochemical & Chemical Processing
- Power Generation & Utilities
- Manufacturing & Industrial Plants
- Pharmaceutical & Life Sciences
- Pulp & Paper
- Mining & Metals

These industries regularly conduct planned shutdowns, turnarounds, or outages and require structured, efficient, and safe execution to minimize downtime and optimize asset performance.

3-DAY AGENDA SUMMARY 50% INTERACTIVE | 50% EXERCISES

DAY 1: SCOPE & BUDGET CONTROL WITH DETAILED PLANNING

- Reliability Asset Management Program (RAMP) for STO
- Prepac® Systems Methodology (Preparation & Packaging)
- Effective Step-out Plans and Job Package Assembly
- Prepac® Systems Methodology Planned Job Package Example
- Strategic Planning Optimization Methodology
- Lowest Cost, Shortest Duration, Fewest Resources

DAY 2: STRATEGIC PLANNING & AGILE SCHEDULING METHODS USING ORACLE PRIMAVERA P6

- Systemization (LOTO to PSSR) Scheduling Method
- Contracting & Execution Strategies for Agile Scheduling
- Strategy Workshop Sessions for Indirect Support
- Primavera™ P6 Lessons for Agile Scheduling Methodology
- Agile Scheduling Methodology and Scheduling Software
- Navigator vs. Pilot (Schedulers' Roles & Responsibilities)
- Direct Resource Histograms & Mobilization
- Highest Safety, Quality, and Resource Utilization

DAY 3: TACTICAL EXECUTION & CONTROLS CENTRAL / KPI DASHBOARDS

- Communication | Coordination | Collaboration (3Cs)
- 3Cs Execution Clocks & Tactical Scheduling Sessions
- Tactical Execution & Controls Central (TECC)
- Pework & Execution Control Rehearsals
- Daily Shift Reports & Progress Updating
- Managing Changing Conditions

3-DAY STO EXECUTION EXCELLENCE WORKSHOP LEARNING MODULES

Executing complex, risky, expensive, and dynamic STO events—to achieve zero incidents, zero rework, and high tool-time efficiency—requires a substantial amount of detailed job package planning, strategic planning, agile scheduling, coordination, and controls to execute the most optimized plan—Lowest Cost, Shortest Duration, Fewest Resources.

This is made possible through formal methodologies (introducing Prepac® Systems Methodology), competent resources, and fit-for-purpose technologies.



THE FOLLOWING LEARNING MODULES ARE COVERED IN THIS 3-DAY STO EXECUTION EXCELLENCE WORKSHOP

Module	Topic	Details
1	<ul style="list-style-type: none"> Reliability Asset Management Program (RAMP) for STO Events Asset Management Team (Asset Owners & Gatekeepers) The Shape of the Organization 	<ul style="list-style-type: none"> Presentation and Workshop Exercise (creating Event Premise and Key Performance Indicators (KPIs)) Presentations & Group Discussion Terminology for STO Execution
2	<ul style="list-style-type: none"> Prepac® Systems Methodology for Detailed & Tactical Planning Step-out Plans and Job Package Assembly (Workface Deliverables) 	<ul style="list-style-type: none"> Presentation and Workshop Exercise Field Planning Form (FPF) and Coding Job Package Contents (LOTO, PSSR, ITP, JHA, and Group Discussion)
3	<ul style="list-style-type: none"> Systemization & Phase Windows Execution & Contracting Strategies Handover to Maintenance 	<ul style="list-style-type: none"> Presentation and Workshop Exercise Demonstration in Scheduling Software Creating Level I to Level V Schedules
4	<ul style="list-style-type: none"> Agile Scheduling Methodology (ASM) Execution Clocks & Communication Coordination & Collaboration 	<ul style="list-style-type: none"> Presentation and Demonstration Workshop Exercise & Group Discussion Workshop Exercise (Execution Clocks)
5	<ul style="list-style-type: none"> Tactical Execution & Controls Center Progress Updates & Change Management (Discovery Work) Daily Execution Plan (DEP) / Mobility 	<ul style="list-style-type: none"> Presentation & Group Discussion Demonstration & Group Exercise Navigator vs. Pilot (Schedulers) Group Discussion & Brainstorming
6	<ul style="list-style-type: none"> Key Performance Indicator (KPI) Executive Dashboards & Analysts Earned-value Performance Management (EvPM) and LEMS Measuring Tool-time Performance 	<ul style="list-style-type: none"> Presentation & Workshop Exercise Tool-time Calculation Exercise Key Performance Indicator (KPI) Dashboard Creation & Power BI Banana Curves & Float Burn
7	<ul style="list-style-type: none"> Flange Management & Pre-Start-up safety Review (PSSR) Document Control & Data Integrity Handback to Operations 	<ul style="list-style-type: none"> Presentation & Workshop Exercise Group Discussion & Brainstorming Demonstration & Discussion Importance of Doc Control & Data Integrity

3-DAY STO EXECUTION EXCELLENCE WORKSHOP AGENDA

Executing complex, risky, expensive, and dynamic STO events—to achieve zero incidents, zero rework, and high tool-time efficiency—requires a substantial amount of detailed job package planning, strategic planning, agile scheduling, coordination, and controls to execute the most optimized plan—Lowest Cost, Shortest Duration, Fewest Resources. This is made possible through formal methodologies (introducing Prepac® Systems Methodology), competent resources, and fit-for-purpose technologies.

The 3-Day STO Execution Excellence Workshop encompasses seven comprehensive learning modules. Below is a breakdown of the topics covered each day.

Day 1	Theme: Detailed & Strategic Planning	Module	Deliverables
AM	<ul style="list-style-type: none"> Reliability Asset Management Program (RAMP) Model Terminology & References The Shape of the Organization 	1	<ul style="list-style-type: none"> Presentation Exercise Exercise
PM	<ul style="list-style-type: none"> Detailed & Tactical Planning Planning Role & Responsibilities Step-out Plans and Job Packages Forward LEMS & iCAT® Budget Control 	2	<ul style="list-style-type: none"> Presentation Discussion Group Exercise Exercise
Day 2	Theme: Agile Scheduling Methodology	Module	Deliverables
AM	<ul style="list-style-type: none"> Agile Scheduling Methodology (ASM) Step-by-Step Systemization & Phase Windows Contracting & Execution Strategies 	3	<ul style="list-style-type: none"> Presentation Group Exercise P6 Demos
PM	<ul style="list-style-type: none"> Level IV to Level V ASM Scheduling (Resource Levelling and Histograms) Strategy Workshops (Cleaning and Permits) 	4	<ul style="list-style-type: none"> Primavera™ P6 Demonstrations Group Exercise
Day 3	Theme: Tactical Execution & Controls	Module	Deliverables
AM	<ul style="list-style-type: none"> Tactical Execution & Controls Center (TECC) Tactical Execution & Controls (TEC) Tactical Execution & Controls Clocks (TECC) Daily Execution Plan (DEP) & Force Reports 	5	<ul style="list-style-type: none"> Presentation Exercise Discussion Demonstrations
PM	<ul style="list-style-type: none"> Key Performance Indicator (KPI) Dashboards Earned-value Performance Management Backward LEMS (Labour, Equipment, Materials, Services) Timesheets Invoices Performance Reporting & Calculating Tool Time Certificates, Photos, Feedback Forms 	6/7	<ul style="list-style-type: none"> Presentation Exercise Demonstration Discussions Feedback Conclusion

COURSE PRE-REQUISITES

To ensure participants gain maximum benefit from the 3-Day STO Execution Excellence Workshop, the following prerequisites are recommended:

- **Basic Understanding of Maintenance and Plant Operations**
- **Participants should have a foundational knowledge of plant maintenance activities and operational workflows.**
- **Experience in Shutdown/Turnaround Projects (Preferred but Not Mandatory)**
- **Ideal for professionals who have been involved in at least one STO project, whether in planning, execution, or support roles.**
- **Familiarity with Project Planning & Scheduling Tools**
- **Exposure to tools such as Microsoft Excel, Microsoft Project, or Oracle Primavera P6 is advantageous.**
- **Mid-Level to Senior-Level Roles in Maintenance, Planning, or Project Management**
- **The course is tailored for maintenance engineers, planners, project coordinators, operations leads, and turnaround managers.**
- **English Proficiency - as the course is conducted in English, participants should be able to read, write and communicate effectively in English.**

TRAINING MATERIALS PROVIDED

Participants of the 3-Day STO Execution Excellence Workshop will receive the following comprehensive training materials to support learning and post-training application:

- **Workshop Workbook – A detailed manual covering all 7 modules, with key concepts, best practices, and case studies.**
- **STO Planning & Execution Templates – Ready-to-use templates for scope planning, scheduling, risk assessment, and cost tracking.**
- **Checklists & Tools – Practical checklists for pre-shutdown, execution, and post-shutdown phases to ensure consistent performance.**
- **Case Study Materials – Real-world STO scenarios for hands-on group exercises and analysis.**
- **Presentation Slides – Printed or digital copies of all slides used during the training sessions.**
- **Reference Guides – Industry standards and guidelines relevant to STO best practices.**
- **Certificate of Completion – Issued to participants who successfully complete the workshop**



EJ LISTER TED -TRAINER

Ted Lister is an internationally recognized subject matter expert in effective planning, scheduling, and controls for heavy industry maintenance events and complex projects.

Ted has acquired three decades of experience under the mentorship of a unique combination of seasoned practitioners and industry leaders in maintenance, reliability, shutdowns, turnarounds, outages, and capital projects in hydrocarbon and mineral processing. His specialized knowledge in agile scheduling with MS Project® and Primavera™ P6 is unprecedented. Ted is currently working on Ai-augmented planning, scheduling, and controls



IPEC PROJECT SYSTEMS SDN BHD

At IPEC Project Systems Sdn Bhd, we are dedicated to equipping professionals with cutting-edge project management skills through our HRD Corp Registered training programs. As an Oracle Gold Partner and an Approved Education Provider (AEP) with AACE International, we offer hands-on training in Oracle Primavera P6, Shutdown Turnaround & Outage (STO) Management, Oracle Aconex, Oracle Unifier, Turbo Chart, and Delay Analysis & EOT Claims. Our industry-recognized courses, conducted at the IPEC Centre of Excellence in Mont Kiara, Kuala Lumpur, provide real-world expertise to project managers, planners, engineers, and decision-makers. With certified trainers, practical learning, and globally recognized frameworks, we help professionals and organizations achieve project success.



ISO 27001
LL-C (Certification)

Phone

03-79566688/5688

Mail

sales@ipecosystems.com.my

Website

www.ipecosystems.com.my

Address

IPEC Centre of Excellence
Unit 28.2, 28th Floor,
Menara 1 Mont Kiara Office Suites, Kompleks 1,
No. 1, Jalan Kiara, 50480, Wilayah
Persekutuan, Kuala Lumpur, Malaysia