

ISTANBUL-TURKEY

23-27 Feb 2026

Effective Productive Plant Operation and Optimization

Why Choose this Training Course?

This Effective Productive Plant Operation and Optimization training course equips participants with the essential technical knowledge, analytical skills, and operational strategies needed to achieve peak plant performance. Efficient plant operation is critical to maximizing output, reducing downtime, minimizing costs, and ensuring safety and compliance.

The course combines process fundamentals, operational best practices, performance monitoring, and optimization techniques tailored to industrial facilities. Participants will learn how to analyze operational data, identify performance gaps, reduce losses, and implement improvements that enhance productivity and profitability.

Through case studies, interactive exercises, and plant simulation scenarios, this program ensures that participants can directly apply concepts to real-world challenges in their plants.

What are the Goals?

- Understand the fundamentals of effective plant operation and management
- Apply process optimization techniques to improve productivity and efficiency
- Analyze operational data to identify bottlenecks and performance losses
- Implement preventive and predictive maintenance strategies
- Ensure safe, reliable, and compliant plant operations
- Develop continuous improvement plans for sustainable performance

Who is this Training Course for?

This course is ideal for:

- Plant managers and supervisors
- Production and operations engineers
- Maintenance and reliability engineers
- Process improvement specialists

- HSE professionals involved in operational safety
- Anyone responsible for maximizing plant performance and efficiency

How will this Training Course be Presented?

The course uses a blend of interactive presentations, case studies, real-life plant examples, group discussions, and simulation exercises. Participants will work through practical scenarios to learn how to identify operational inefficiencies, optimize processes, and achieve sustainable performance improvements.

Course Outline

Day One: Fundamentals of Plant Operation

- Overview of industrial plant systems and processes
- Roles and responsibilities in plant operations
- Key performance indicators (KPIs) for plant performance
- Operational safety and compliance requirements (K-EPA regulations, OSHA, and industry standards)
- Introduction to plant monitoring systems
- Kuwait case examples: production losses due to operational gaps

Day Two: Operational Excellence Principles

- Best practices for plant productivity and efficiency
- Understanding process flow and material balance
- Identifying operational bottlenecks
- Minimizing waste and non-value-added activities
- KPI dashboards for operational decision-making
- Case study: operational excellence in a production plant

Day Three: Maintenance and Reliability Integration

- Role of maintenance in plant productivity
- Preventive, predictive, and reliability-centered (RCM) maintenance
- Downtime analysis and reduction techniques
- Asset management strategies
- Spare parts planning and inventory control

Day Four: Process Optimization Strategies

- Data-driven process analysis
- Lean manufacturing and Six Sigma basics
- Energy efficiency improvements
- Process automation and digital monitoring tools
- Debottlenecking and capacity optimization techniques
- Optimization case studies

Day Five: Disputes and Compliance

- Building a continuous improvement culture
- Root Cause Analysis (RCA) for operational problems
- Developing an operational improvement plan
- Team collaboration and change management
- Performance review systems and feedback loops
- Final assessment and workshop on plant optimization

Course Completion Certificate

On successful completion of the Training Course, the participants will be awarded with a 5M International Consultancy & Training Company Certificate.

Training Fees details:

Number of Participants	Course Price
1 participant	KWD 1550.000
2 participants	KWD 1500.000
3 participants	KWD 1450.000
4 participants	KWD 1400.000
5 participants	KWD 1350.000
6 and above participants	KWD 1300.000