

Data-Driven Quality Management

COURSE OVERVIEW

In a rapidly evolving business landscape, organizations must shift from reactive quality control to proactive, data-driven quality management. This course provides participants with the knowledge and tools to integrate data analytics into quality systems, enabling real-time decision-making, process improvement, and strategic performance management.

Delegates will explore methodologies such as Six Sigma, Statistical Process Control (SPC), and root cause analysis, while learning how to leverage digital tools and dashboards to monitor quality metrics across operations. The course is highly practical, focusing on turning raw data into actionable insights that improve product, service, and process quality.

WHO SHOULD ATTEND?

This course is suitable for Quality Managers, Process Improvement Specialists, Data Analysts, Operations Managers, Manufacturing Professionals, Auditors, Compliance Officers, and anyone involved in quality control and assurance functions.

COURSE OUTCOMES

Delegates will gain knowledge and skills to:

- Understand how data analytics supports modern quality management systems
- Apply statistical tools to monitor, measure, and improve quality
- Integrate quality data into dashboards and performance reports
- Use root cause analysis and predictive analytics to prevent defects
- Align quality metrics with organizational goals and customer expectations
- Implement a culture of continuous improvement based on data evidence

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- Introduction to data-driven quality management principles
- Statistical Process Control (SPC) and quality measurement tools
- Predictive analytics for identifying quality risks and failure points
- DMAIC (Define, Measure, Analyze, Improve, Control) framework
- Digital tools for quality dashboards and real-time monitoring
- Root cause analysis using data modeling and visualization
- Applications in manufacturing, services, and supply chain quality
- Compliance with ISO 9001 and other global quality standards

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded